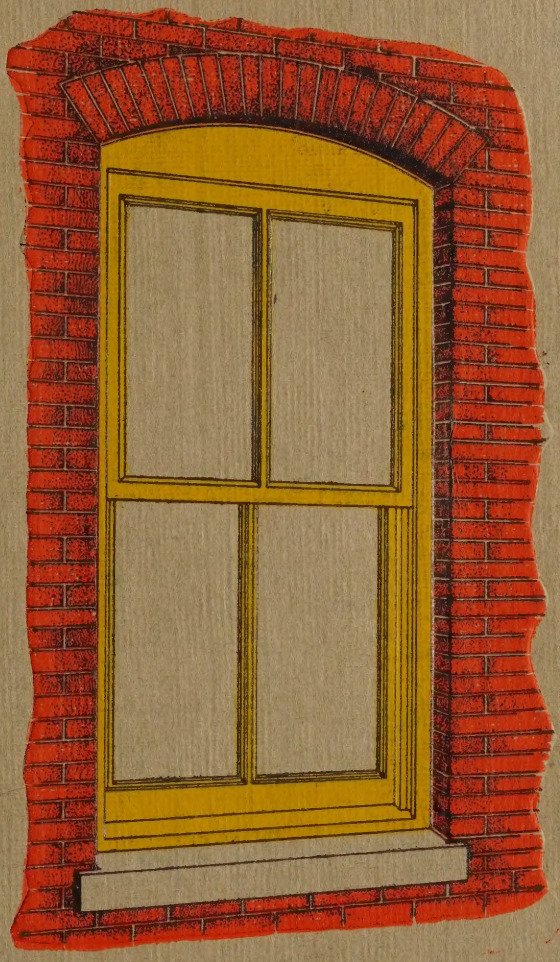
c.1910

"MECCO"

FIRE-PROOF

WINDOWS



THE MOESCHL-EDWARDS CORRUGATING CO.

EVERYTHING IN SHEET METAL BUILDING MATERIAL.

COVINGTON. KENTUCKY.

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CATALOGUE W

The Moeschl-Edwards Corrugating Co.

Incorporated

COVINGTON, KENTUCKY

OPPOSITE CINCINNATI

The Moeschl-Edwards Corrugating Co.

(INCORPORATED)

Manufacturers of

"MECCO"

Fire-Proof Metal Windows

A Real Fire-Proof Window

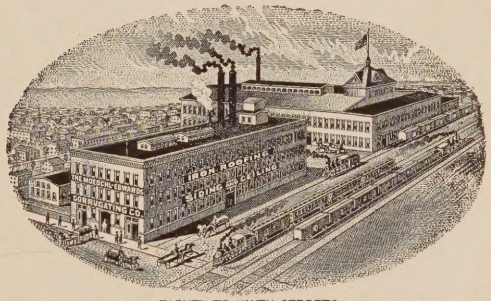
and

Everything

in

Sheet Metal Building Material

For Interior and Exterior



EIGHTH TO NINTH STREETS,
CHESAPEAKE & OHIO AND LOUISVILLE & NASHVILLE RAILROADS.

Office, 76 West Ninth Street

Private Telephone Branch Connecting All Departments

Covington Opposite Cincinnati Kentucky

FORESIGHT versus HINDSIGHT

Here in America, with a fire loss ten times greater than that in any European country, we regard the Red Peril in a fatalistic way, and all the while one-fourth of all we build is being consumed by flames. A quarter of a billion dollars is our average annual fire loss; two thousand lives every year are sacrificed to fire; industry is choked, often destroyed; heavy burdens of insurance and fire tax weigh us down. Why? Because we are careless and indifferent to danger.

Thirty-seven industries alone, during the last five years, have suffered a loss of $661,000,000 through fire, and back of all this loss is still the heavy burden of fire tax—the cost of maintaining water systems, fire departments and fire insurance. When will this great waste end? Can nothing be done? Yes, something can be done. There is a way out of this shameful destruction. Fires can be checked, lives and property saved.

The great fires at the Iroquois Theatre, Collinwood School, Triangle Shirtwaist Company, Missouri Athletic Club, Edison's Plant, the Baltimore, Salem, St. Augustine and San Francisco fires, might all have been avoided with adequate protection.

The time has passed when property owners can feel that they are protected by the fire departments conducted by towns and cities. Efficient as are these departments, in many cases there are conditions in fires with which they cannot cope.

Fire, indeed, is the Great American Folly, and most of us in this country fancy ourselves secure in being "protected" by fire insurance, which belief is the Great American Delusion.

Seventy-three percent of all the damage done by fire to buildings other than that in which it originates is attributable to improperly constructed windows. More than that, 48 percent of the entire loss of the country is traceable to lack of window protection.

We think that the addition of the word "good" or "adequate" before the words "window protection" is necessary, for our claims refer only to the highest type of metal windows, affording the maximum of fire protection.

On the following pages will be found illustrations with description of appliances, together with data, for automatic fire protection, one of the greatest contributions to modern efficiency, whose value, economically and as a life-saver, cannot be reckoned in terms of money. This protection is within the reach of all, yet annually we look upon a national ash heap, which is—and justly so—a subject of world criticism.

You cannot prevent some fires from starting, but you can prevent all fires from spreading. Nobody ever expects fire, yet it comes with the grim regularity of taxes. Safety at a profit—that is the real meaning of an installation of Mecco Fireproof Windows.

This protection cannot be ranked too highly as an important and absolutely necessary factor of our social and industrial system. Aside from its value as a vigilant watchman over life and property, the window installations have proven themselves of enormous value in preventing interruption or demoralization of business. But the great economic value of this automatic fire protection is the regular insurance savings through the installation of Mecco Windows. Fire insurance rates are reduced from 20 to 40 percent, representing the saving annually of many millions of dollars now needlessly spent. The remarkable feature of it all is that this protection to life and property can be secured by the property owner out of the insurance saved.

In considering the subject of Metal Windows, Architects and Owners should not take it for granted that one make of Window is as good as another. Two watch cases could be alike, yet there might be a vast difference in the value of the two as time pieces, according to the worth of the "works."

Many architects and owners have been following a false theory in this matter. It is a very great mistake to conclude that any metal window, simply because it bears the Underwriters' label, is "good enough." Poorly constructed metal windows have been adjudged by the National Board of Fire Underwriters as inferior to good wooden windows, for the reason that when exposed to heat poor metal windows quickly fail, the weight of the wired glass causing them to warp and come apart and the glass falls to the street. This is a fact that has not not been generally recognized, and we predict that many of the so-called fireproof (?) windows that have been installed and are offered to the public will prove a dire disappointment when put to the test.

The occupants of a new building are only in a short time before they call on the janitor or handy man to have the doors and windows fixed so that they will open and close; this is true of both wood and metal windows unless they are provided with adjustments between the sash and frame. Contraction and expansion of the different materials, the settling of the building, the drying out of the lumber, cement and mortar all affect both windows and doors in all buildings. It is not a difficult task to fit wooden windows, as the sash can be taken out and sawed or planed until they slide smoothly; but with metal windows it is a different problem, as it is impossible to plane or cut anything off of the metal sash, and to overcome this the majority of metal windows on the market have been made with the sash much narrower than the opening in the frame, which reduces the fire retardant qualities 50 percent.

The manufacturer of Metal Windows who wishes to have his windows approved, makes a sample window with all the parts over-lapping as much as possible and with all joints fitting close. This is necessary in order to keep the fire from passing between the sash and the frame. If windows were made like the sample submitted to the Underwriters, it would be impossible to have them slide up and down after they were in the building, as the expansion and contraction of the materials and the settling of the building would make them so tight that they could not be moved.

You no doubt have seen Metal Windows where the sash was ½-inch narrower than the opening in the frame. In this event, after the sash is forced to one side, it will only allow a bearing surface of about ⅛-inch, whereas it should be ½-inch. No manufacturer can overcome this faulty construction, except those who have adjustable parts between the sash and the frame. In our Double Hung Windows we have provided such a construction which the Underwriters have approved. On the following pages we give full description, together with illustrations, showing how we make a perfect fit between the sash and the frame.

We are manufacturing absolutely the highest grade of Metal Windows, "MECCO," and our prices fit the work. We have but one standard, the best, a real window.

Architectural Sheet Metal Work made to order and to meet any individual requirements, constructed to meet the architect's specifications, and in harmony with any type or size of building.

To compare prices is superficial and unsatisfactory, unless a fair and just allowance is made for difference in real value.

Double Hung Metal Windows

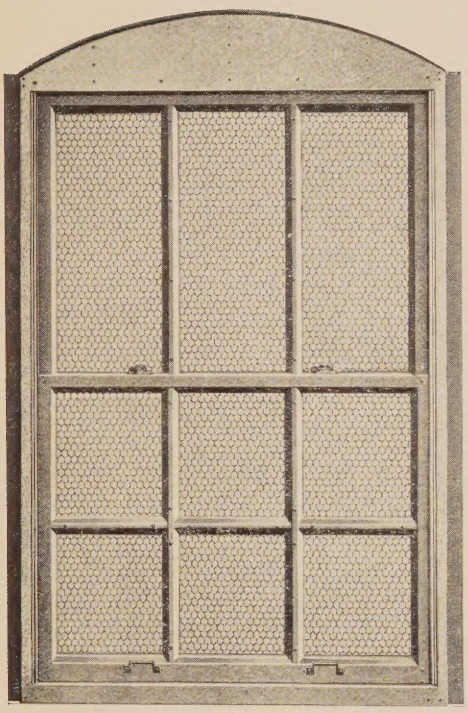


Fig. 1501.

Shows inside view of Double Hung Window, taken before the fire and water tests at the Underwriters' Laboratories, at Chicago, Ill.

Double Hung Metal Windows are made of No. 24 gauge Galvanized Sheets and 20-ounce Cold Rolled Copper, with hollow air chamber construction throughout. Every piece of metal used in connection with any of our windows is cut with dies and formed with heavy power presses using steel dies. This assures accuracy.

The different parts of the frame and sash are assembled in adjustable forms and gigs. This insures true and accurate work and exactness of size. The different parts of the frame and sash are joined with lugs interlocking each other, which afterwards are riveted. The entire Window is assembled in the most modern way known; the rules and specifications of the National Board of Fire Underwriters, of Chicago, are followed in every detail, and we guarantee that all our Windows will be accepted without question by those in charge of insurance.

Our Double Hung Window contains several points of merit not found in any other Window. The adjustable feature between the sash and frame should appeal to architects, contractors and owners, as it makes a Metal Window easier to adjust than a wood window after the building has settled and the sash has become tight. This feature is fully explained on pages 6 and 12.

The air chamber with reinforced locks at both top and bottom of the meeting rails is another feature which makes our Windows superior to all others. (See page 11.)

The channel runways in which the sash slide are made from one continuous piece; this allows the sash to slide up and down in a smooth, easy manner. The sash do not slide over any joints or openings made in the jambs for inserting weights. The head of the Window is so constructed that the pulleys may be replaced should it become necessary. It is not necessary to take the sash out of the frame in order to insert or remove weights.

All styles of Windows are designed so that any style staff bead may be used. For staff beads, see page 18.

When wanted, we make our Double Hung Windows to close automatically in case of fire.

See pages 42 to 45 before ordering.

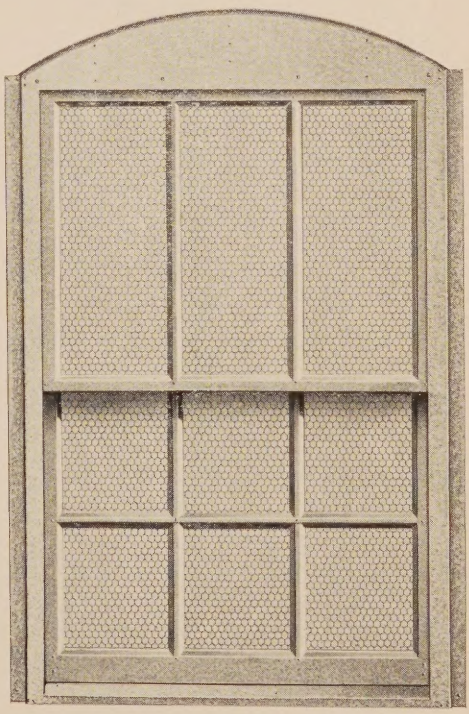


Fig. 1502.

Shows outside view of Double Hung Window, taken before the fire and water tests at the Underwriters' Laboratories, at Chicago, Ill.

Double Hung Metal Windows

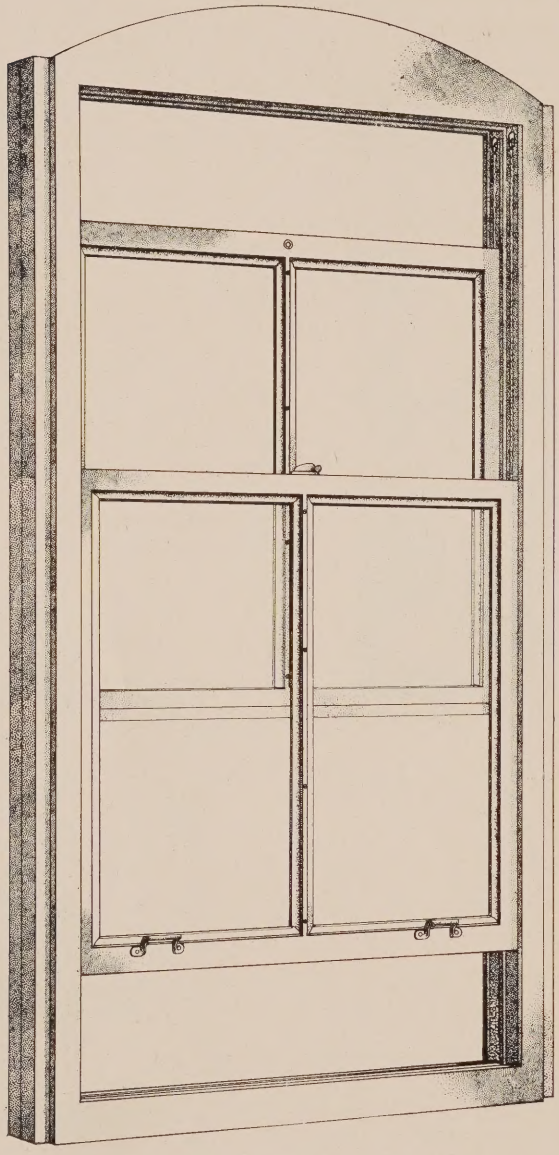


Fig. 1503.

Shows inside perspective view of Double Hung Window, with top sash lowered and bottom sash raised.

The latest and best construction known is used for making the sash **run smoothly** and easily.

Our Mecco Double Hung Windows have one-half more fire retardant **qualities than** any other Windows on the market; besides, they will neither rattle **nor bind.**

The soffit on the head of the Double Hung and Counter-balanced Windows **is re**movable to permit inspection or replacing of pulleys should it become **necessary.**

Double Hung Metal Windows

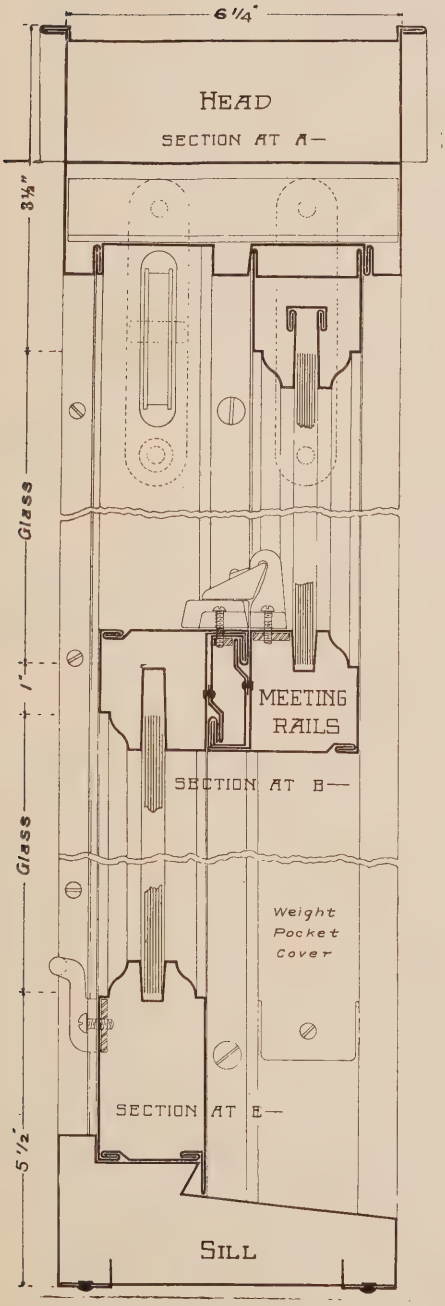


Fig. 1504.

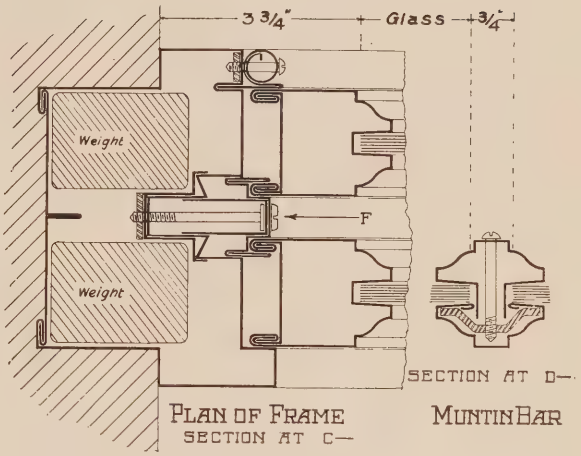


Fig. 1505.

Details of Double Hung Window

Figure 1504 shows vertical section through frame and sash.

MECCO Windows are designed with a wide bearing surface on the bottom of the rail that rests on the sill. With this construction no holes are worn in the metal.

The over-lapping flange does not come in contact with the sill. This flange, together with the offset in the sill, provides an air chamber through which dust and draughts can not pass.

Figure 1505 shows horizontal section through frame, stiles and muntin. Larger section may be seen on page 10.

Double Hung Metal Windows

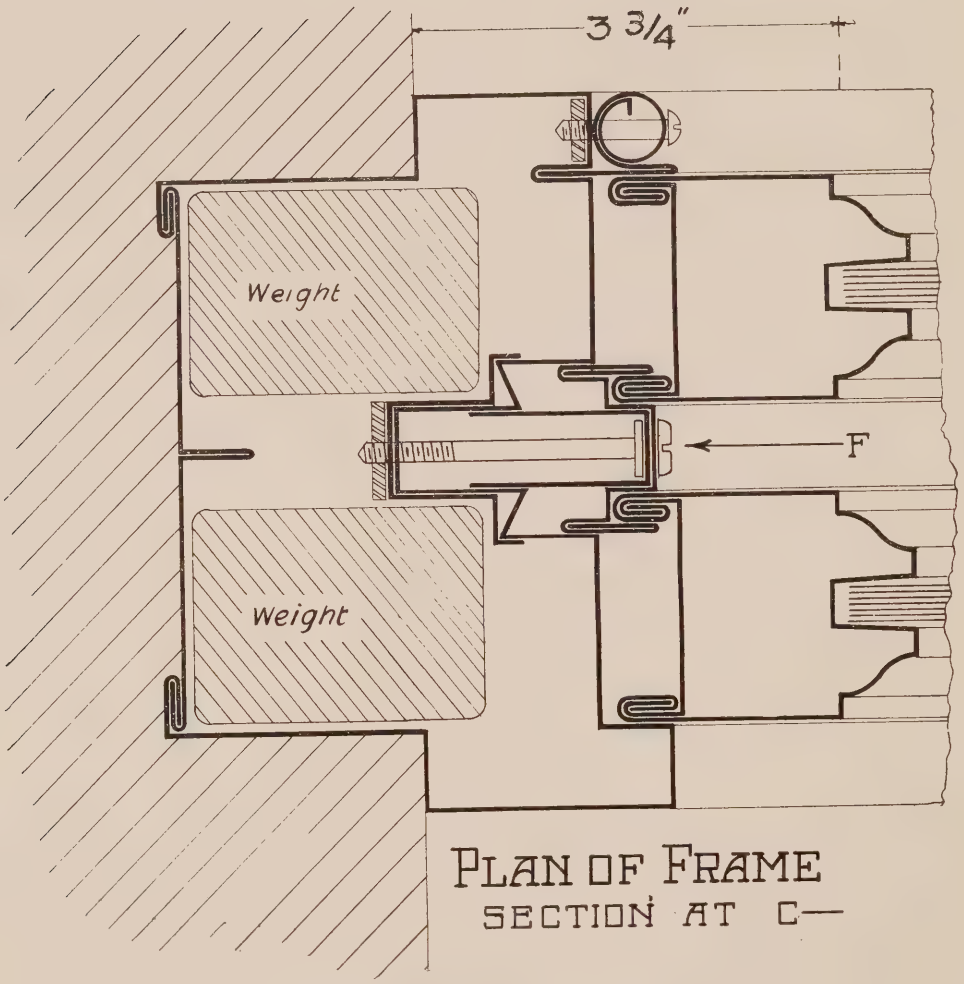


Fig. 1506.

Patent Applied For.

Shows section through jamb and stile. By turning the screw marked "F" to the right, the channels in which the stiles slide are drawn into the pocket of the jamb. By this operation, smooth and perfect running of sash is obtained. Adjustment can be made so that sash will not bind.

The pocket in the jamb in which the adjustable channels are located also provides a parting for the weights. It is impossible for the weights to twist or become clogged. A reinforcement is placed over the pocket to prevent wear.

We have not tried to see how cheap, but how well we could build Metal Windows. If you would have a real window, specify "MECCO."

Double Hung Metal Windows

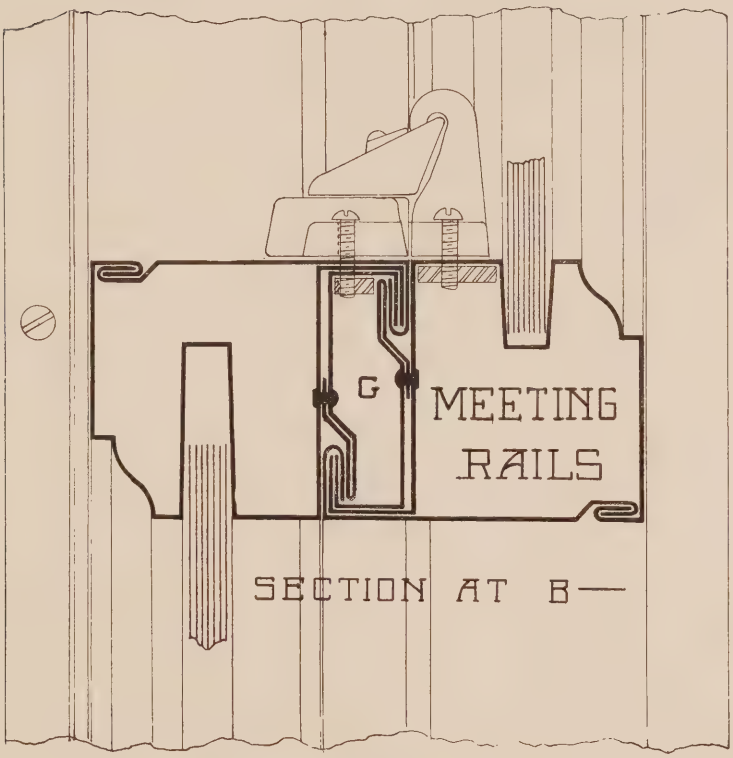


Fig. 1507.

Patent Applied For.

From a fire retardant standpoint the meeting rails of a Double Hung Window present the weakest point. Many constructions have been designed to overcome this objection. Some constructions are designed with lapping edges, others with one interlocking hook, others with two; two, of course, are better than one.

If you would have a Window with the very best construction at this point, you should require that the meeting rails have deep tongues and grooves interlocking each other, both on the lower and top part of the rail. These parts should be strengthened with No. 16 gauge reinforcement riveted to each rail, and there should be an air space between the two locks.

The MECCO Double Hung Window alone has these features, and unless you have a window so constructed, fire will come through if given a severe test. The Double Lock with the air space between is a new feature in Metal Window construction, and is not found in any window except the MECCO.

Double Hung Metal Windows

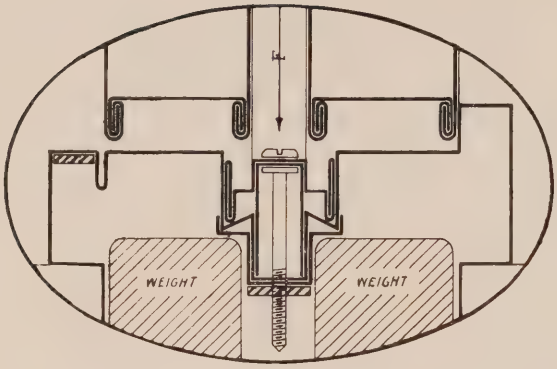


Fig. 1508.

Figure 1508 shows section of jamb with adjustable channel slide inserted in pocket as far as it will go, and sash in place ready for adjustment of channel slide.

Figure 1509 shows section of jamb and sash with adjustable slide located at the point where the sash will operate easily.

This cut also shows the stop bead on the inside of frame.

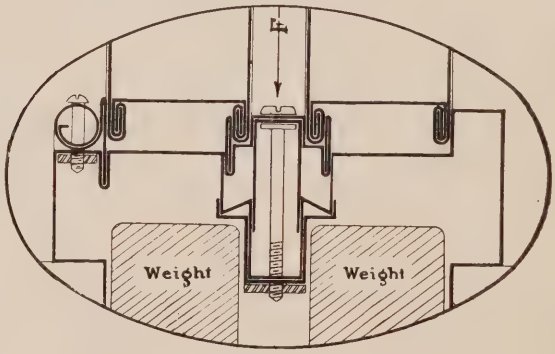


Fig. 1509.

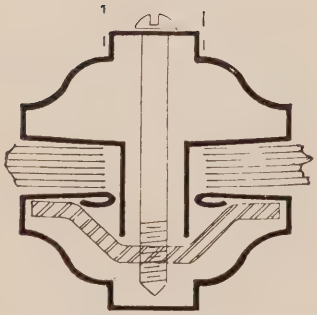


Fig. 1510.

Figure 1510 shows detail of inside and outside section of muntin, together with special screws and clips used in connection with same. All clips inserted in muntins are held in place by a special clamping device. The screws are all electro-galvinized and will not rust.

Double Hung Metal Windows

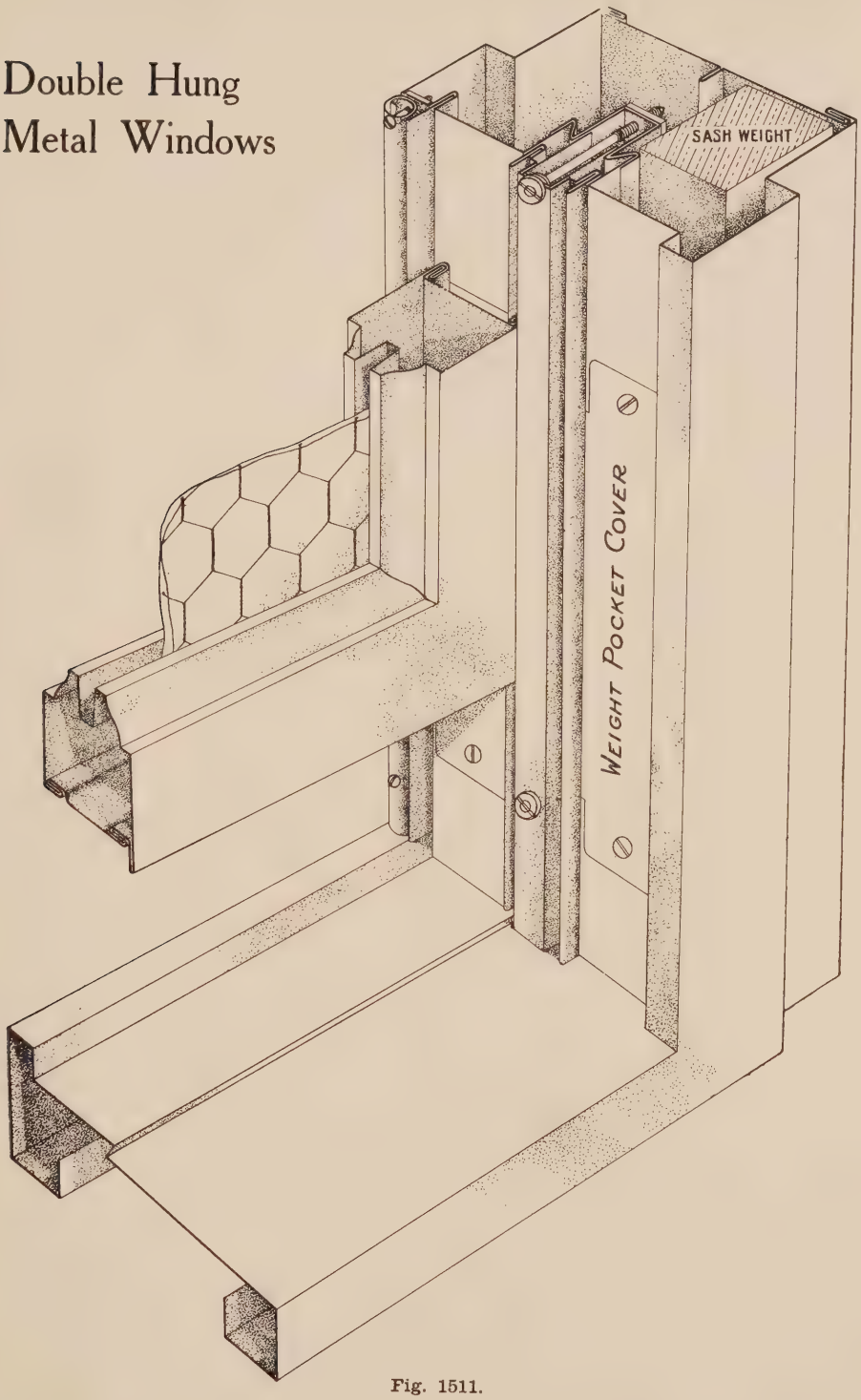


Fig. 1511.

Shows a perspective view of jamb and sill with a portion of the sash inserted in the adjustable **channels.** Note the channel is continuous, that there are no joints to obstruct the free and easy running **of the** sash.

Counter-Balanced Metal Window

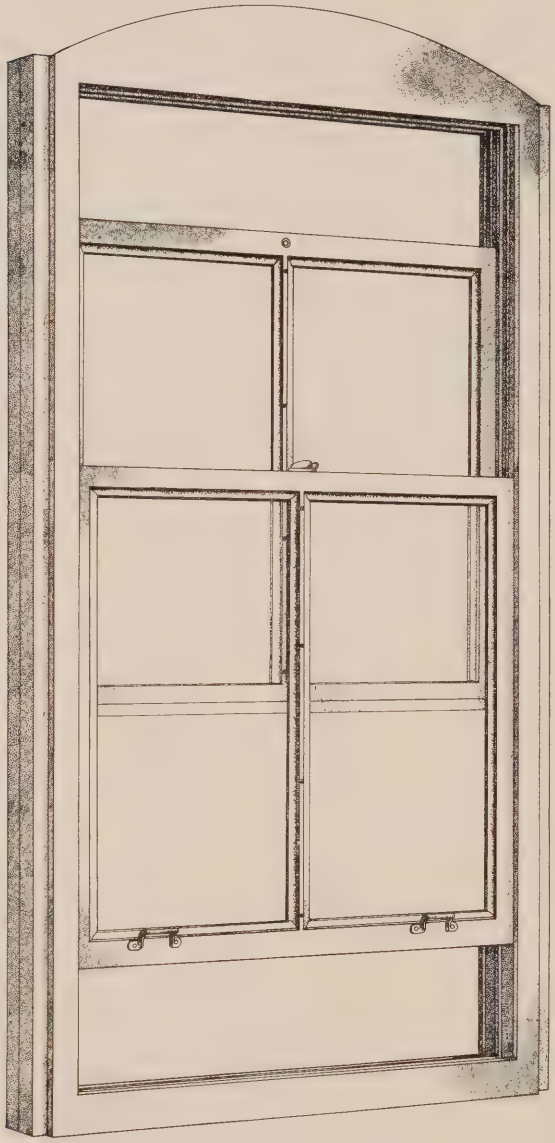


Fig. 1512.

Shows interior view of Counter-balanced Window. The outlines of this Window are the same as our Double Hung Window. The sash are so arranged that one sash counter-balances the other, thus doing away with the necessity of sash weights. The adjustable feature, the reinforced meeting rails, the dust and dirt trap, and all other superior points of construction found in our Double Hung Window are also used in our Counter-balanced Window. See page 15 for details.

By adding a series of chains, weights and fusible links, this Window can be made to close automatically in case of fire.

Counter-Balanced Metal Window

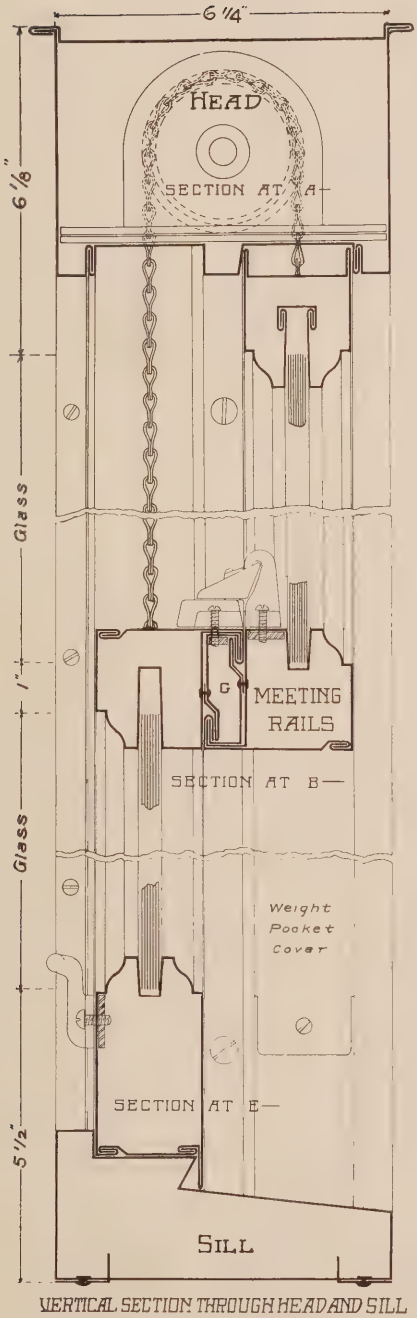


Fig. 1513.

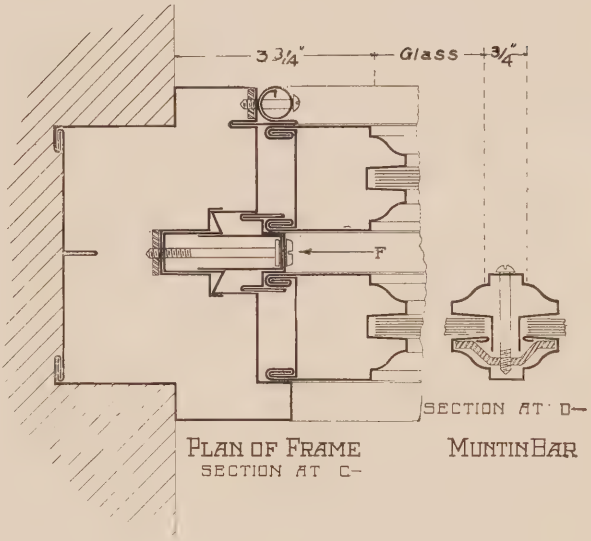


Fig. 1514.

Figure 1513 shows vertical section through Counter-balanced Window. The sash are connected with chains which pass over pulleys in the head. By raising the lower sash, the top sash will automatically be lowered.

The special feature with our Counter-balanced Window provides that it may be changed to a Double Hung at any time after it is set in the wall. The jambs are so constructed that weights and pulleys may be inserted at any time.

Figure 1514 shows horizontal section of jamb and muntin. The outlines of this Window are exactly the same as the Double Hung.

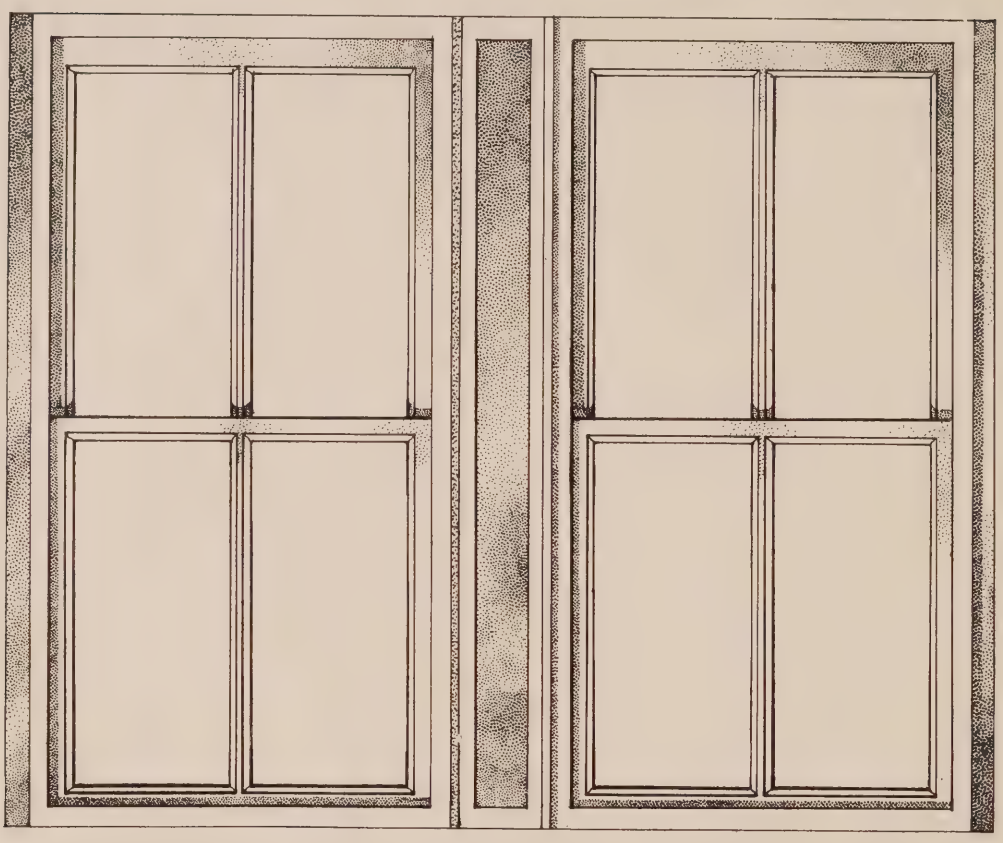


Fig. 1515.

Shows Double Hung Counter-balanced Twin or Mullion Window with I-beam mullion and casing between.

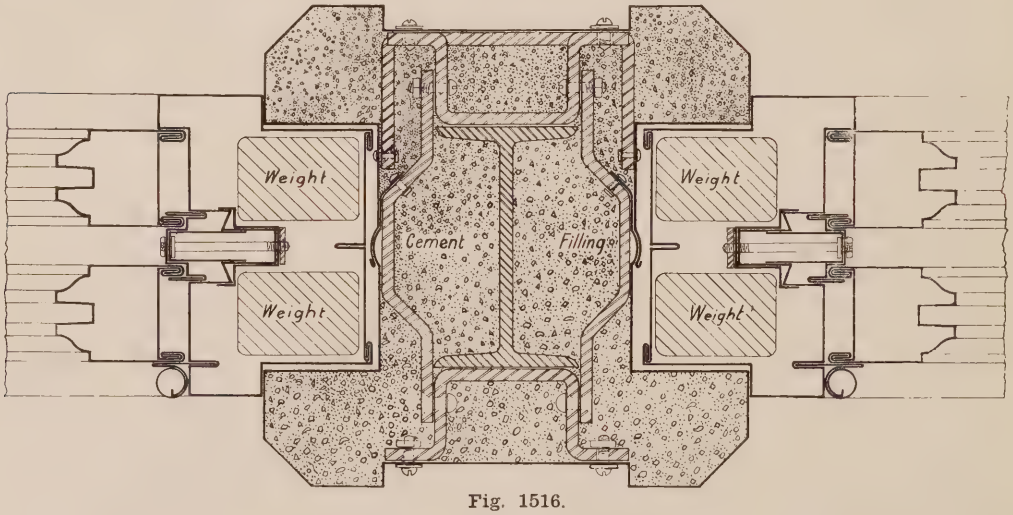


Fig. 1516.

Shows section of vertical I-beam mullion with braces and sheet metal casing for Double Hung and Counter-balanced Windows.

Where the width and height of opening exceed five feet, this construction is required by the underwriters. In openings where the height does not exceed five feet and the width is not more than nine, the I-beams are not required. Where I-beams are used, they must extend into the walls not less than two inches at each end. The depth of the I-beam to be not less than 5 inches, which must be surrounded by concrete or other approved material 2 inches thick on the flanges and 2½ inches next to the web.

Double Hung or Counter-Balanced Single Window

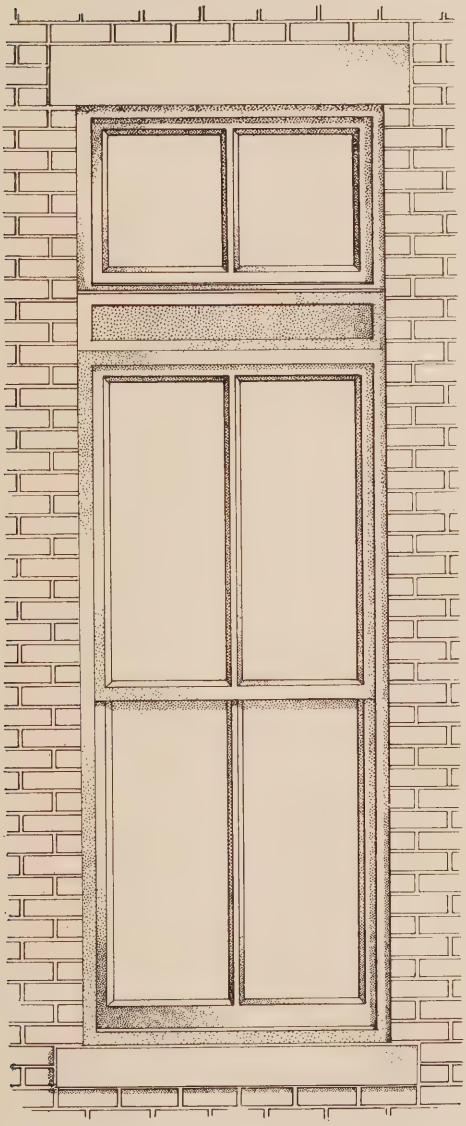


Fig. 1517.

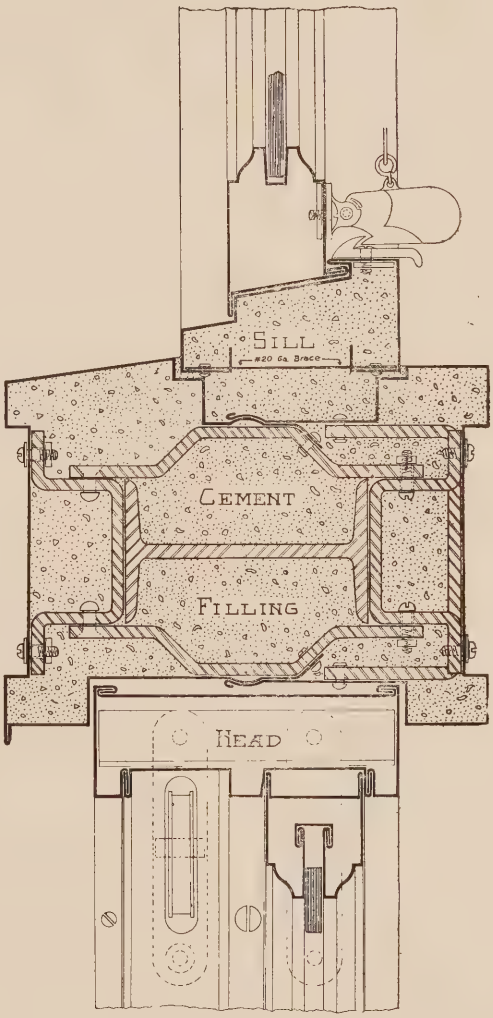


Fig. 1518.

Figure 1517 shows Double Hung or Counter-balanced Single Window with pivoted, hinged or stationary transom. When the height exceeds nine feet, it is necessary to insert a horizontal mullion, as shown in Figure 1518. Both ends of the I-beam must extend into the walls not less than four inches.

Unless specified otherwise, the frames are made flush on the inside.

Staff Bead Designs

Provision has been made for constructing our Windows with any style staff bead or moulding the architect or owner may desire. The following designs show suggestions.

We can furnish any style standard or special staff bead on any Metal Window we make. All Windows are furnished without staff beads unless otherwise specified.

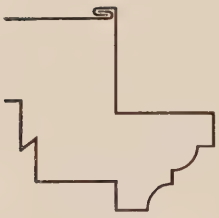


Fig. 1519.

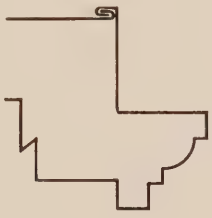


Fig. 1520.

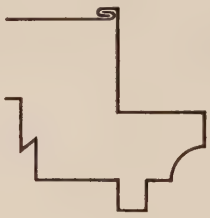


Fig. 1521.

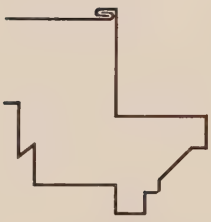


Fig. 1522.

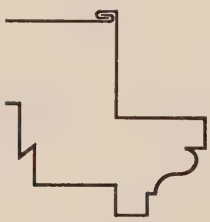


Fig. 1523.

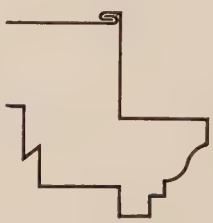


Fig. 1524.

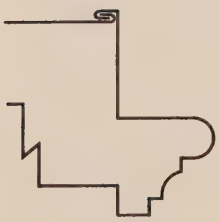


Fig. 1525.

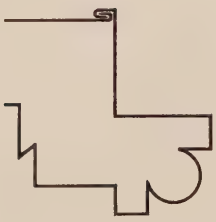


Fig. 1526.

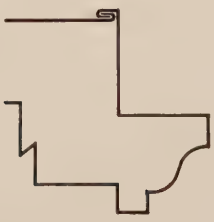


Fig. 1527.

Fig. 1529.

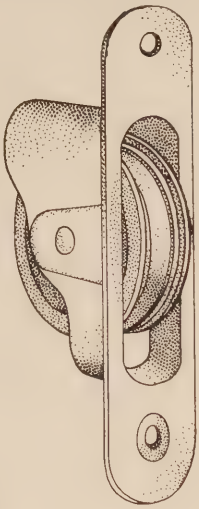


Fig. 1530.

Show front and side view of machine turned pulleys used in connection with all Double Hung Windows. Made from malleable iron.

Fig. 1531.

Shows type of chain used in connection with all Windows.

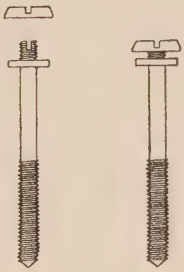


Fig. 1532. Fig. 1533.

Shows special screw and nut used to adjust runways in Double Hung and Counterbalanced Windows.

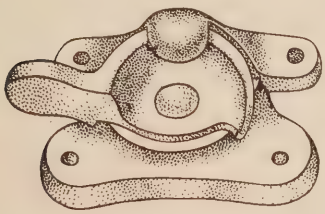


Fig. 1534.

Shows sash lock used on sliding sash. These locks are made from malleable iron and plated dull brass finish.

Fig. 1535.

Shows sash pull.

Fig. 1536.

Shows fusible link used with all automatic closing devices

Fig. 1537.

Shows muntin screws used in all Windows.

Fig. 1538.

Shows malleable iron standard sash lift.

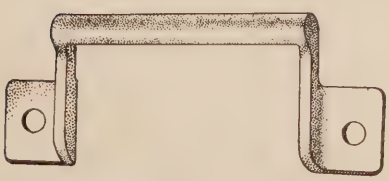


Fig. 1539.

Shows malleable iron off-set sash lift.

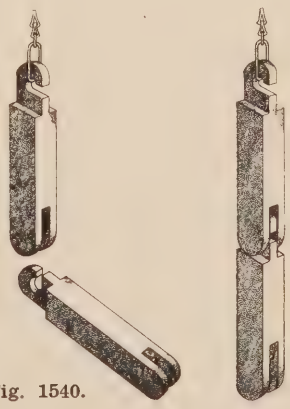


Fig. 1540.

Shows section sash weights used in connection with Double Hung Windows. These weights are made in 6, 8 and 10-inch lengths, weighing 6, 8 and 10 pounds respectively. Unlike other sectional weights on the market, these weights are made to enter on either side and it is impossible to connect them together wrong.

Special—All screws of every description used in connection with Metal Windows are electro-galvanized.

Casement Windows

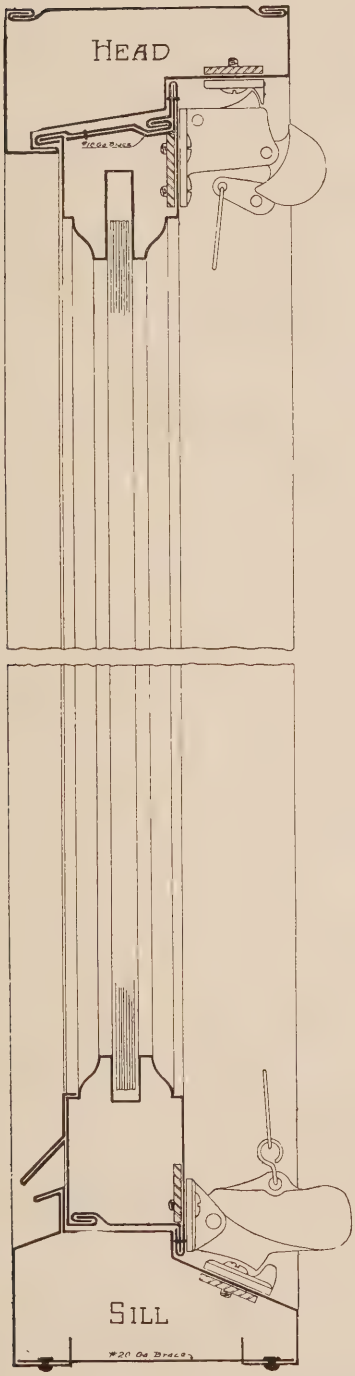
Can be Made to Close Automatically in Case of Fire

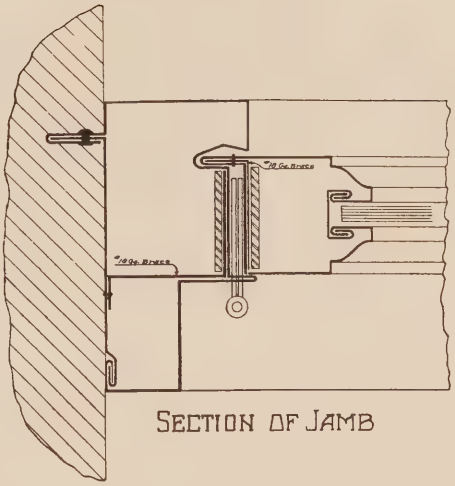
Fig. 1541.

Shows elevation of Casement Window. For details see page 21 and 22. This style window is made with one or two sash to swing in or out. In ordering, indicate which way sash are to swing. For fire escapes the sash should swing out. The windows are provided with the best hinges and three-way automatic lock control.

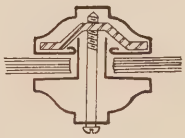
Casement Windows

Opening In

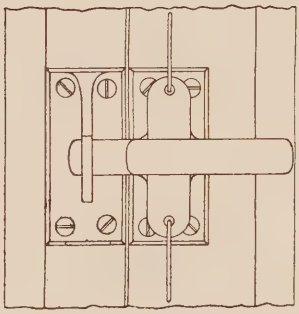




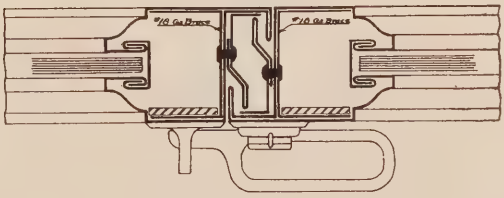
SECTION OF JAMB



MUNTIN BAR



ELEVATION OF CENTER LOCK



MEETING RAILS

Fig. 1542.

Shows construction of all parts of Casement Window to open in.

Casement Windows

Opening Out

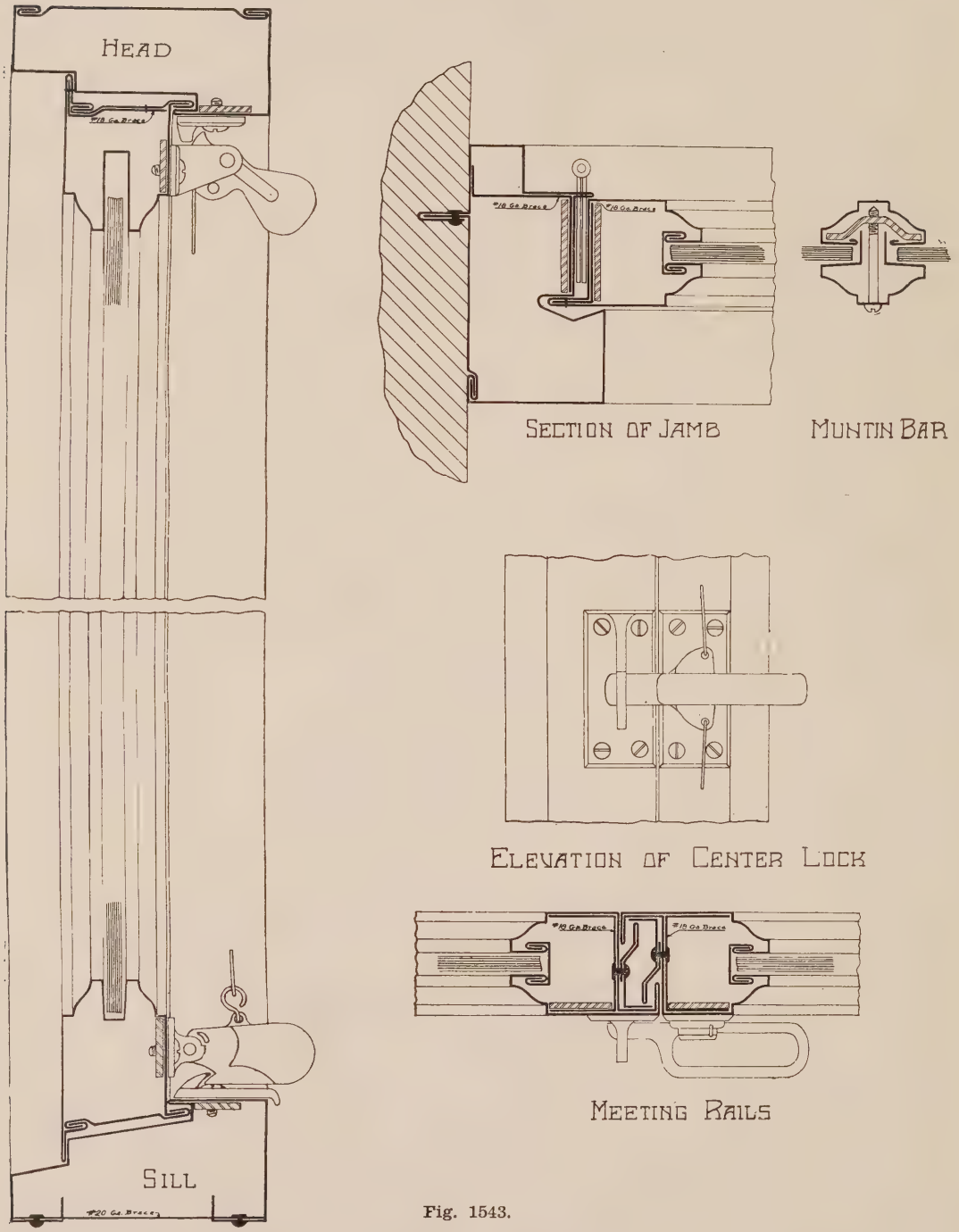


Fig. 1543.

Shows **construction of all parts** of Casement Window to open out.

Pivoted Windows

Fig. 1545.

Shows inside view of "Mecco" Standard Pivoted Window, taken before the fire and water tests at the Underwriters' Laboratories, at Chicago, Ill.

Pivoted windows are made of No. 24 gauge Galvanized Sheets and 20-ounce Cold Rolled Copper, with hollow air chamber construction throughout. All parts are die cut and formed with power presses on steel dies. The same improved method used in assembling Double Hung Windows is used in assembling all styles, whether Pivoted, Hinged, Stationary, or Casement. The rules and requirements of the Underwriters are followed in every instance.

In frames where the sash is pivoted horizontally, the sash is hung with the pivots one inch above the center; this allows the sash to close by gravity. When open, the sash is held in position by a chain that runs through an eye attached to the upper lock and passes down to the lower lock to which it is attached by a fusible link that will melt at 160 degrees, releasing the sash, which will close and lock at both top and bottom automatically.

The trunnions on which the sash revolve for cleaning are designed with a stop which prevents the sash from being tilted too far to prevent its positive closing in case of fire.

The pivots are adjustable, thus providing means for adjustment of sash in the frame.

All hardware used in connection with Pivoted Windows is made from malleable iron. The bearings have brass bushings to prevent the possibility of rust interfering with positive action and to insure easy and uniform operation. The seal between the sash and frame, which is shaped to give the maximum of rigidity, closes the opening completely. All transom bars are reinforced with No. 16 gauge material.

Our Pivoted Windows contain every desirable feature known to window manufacturers and insurance inspectors.

Fig. 1546.

Shows outside view of "Mecco" Standard Pivoted Window, taken before the fire and water tests at the Underwriters' Laboratories, at Chicago, Ill.

Standard Pivoted Window

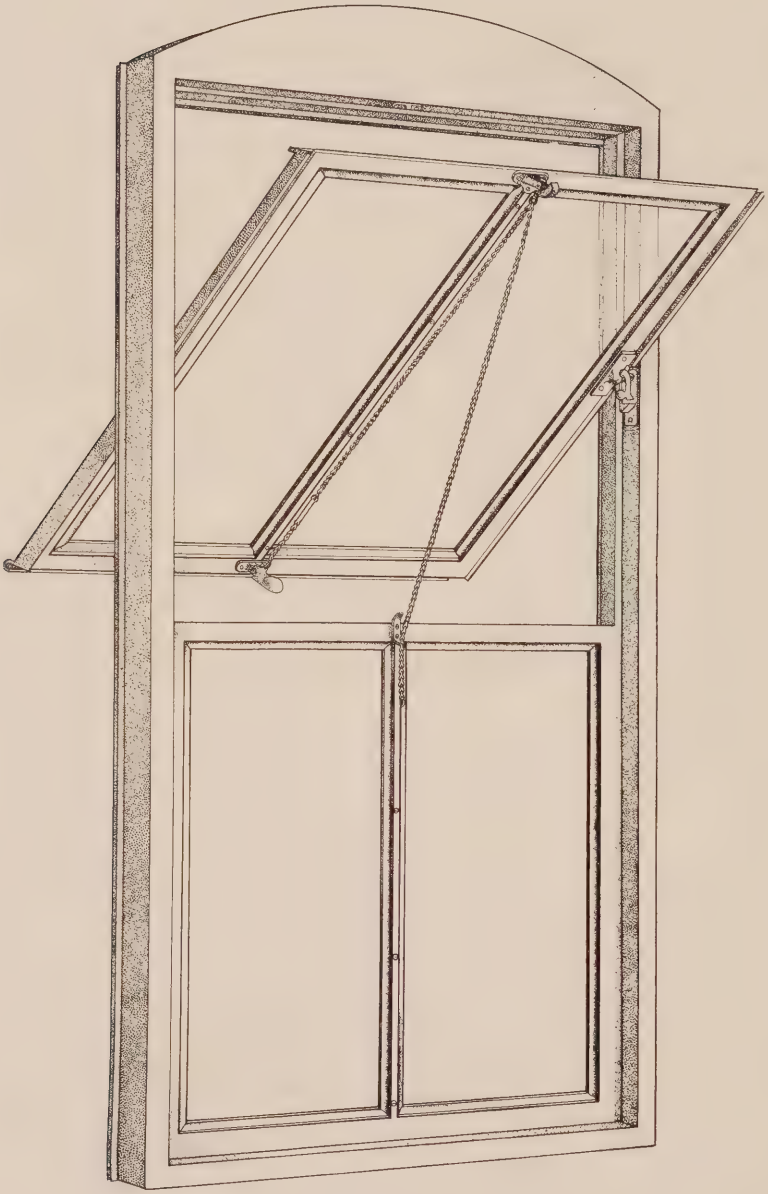
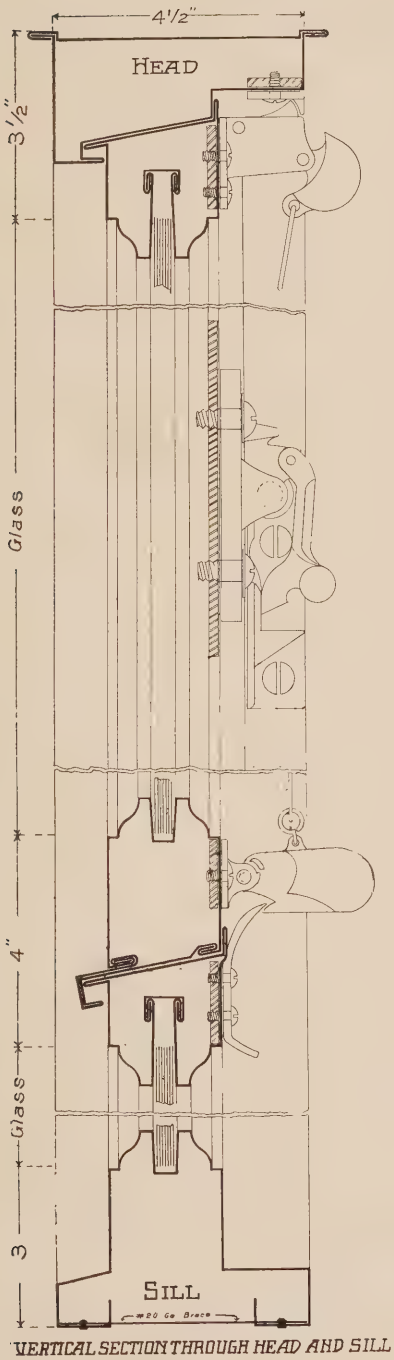


Fig. 1547.

Shows Standard Pivoted Window with top sash pivoted and lower sash stationary, equipped with automatic closing device. This type is intended for factories, shop buildings, warehouses, light courts, etc., where ventilators are wanted over head. Complete details on page 25.

Standard Pivoted Window



VERTICAL SECTION THROUGH HEAD AND SILL

Fig. 1548.

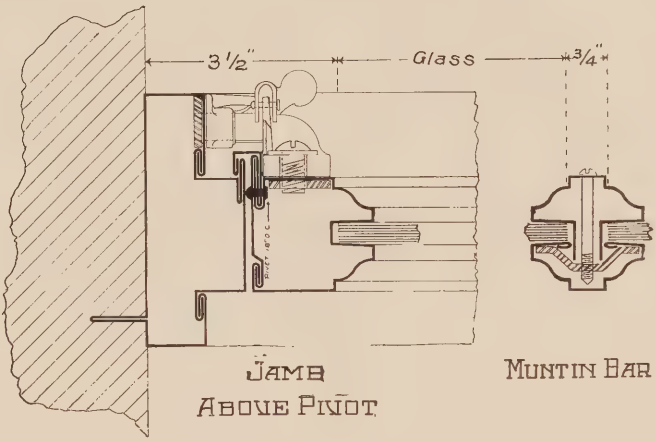


Fig. 1549.

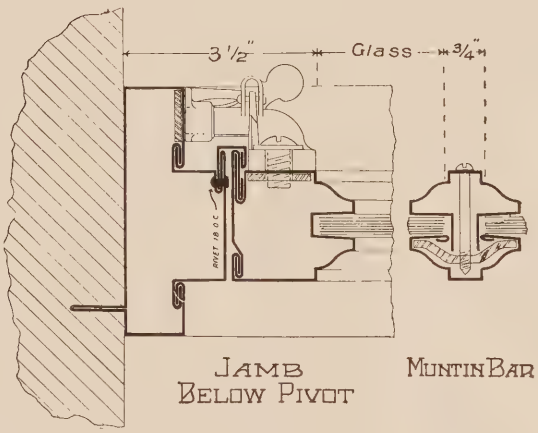


Fig. 1550.

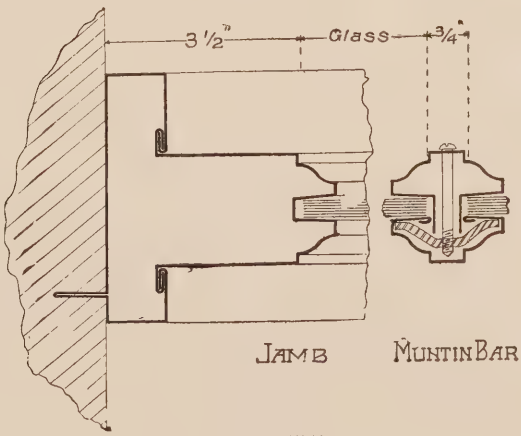


Fig. 1551.

Shows sections of all different parts of Standard Pivoted Windows.

Reverse Pivoted Window

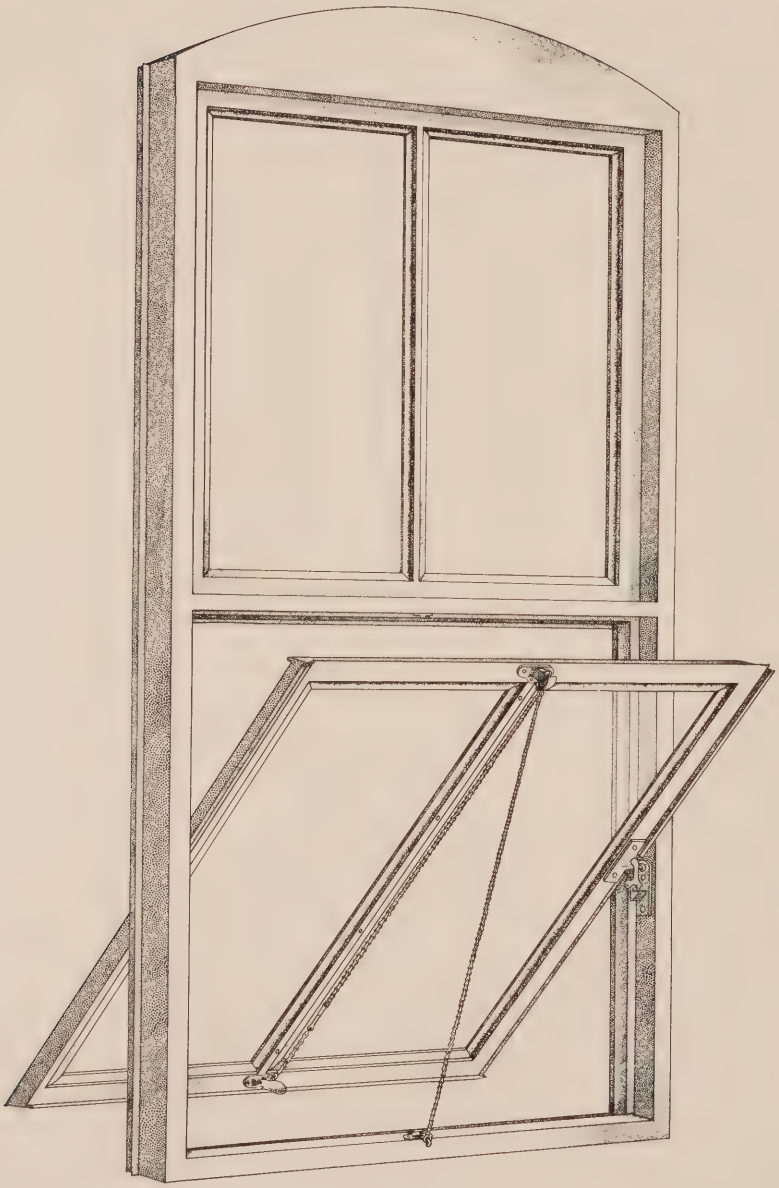


Fig. 1552.

Shows frame with lower sash pivoted and top sash stationary. This is just the reverse of our Standard Pivoted Window. See page 27 for details.

Reverse Pivoted Window

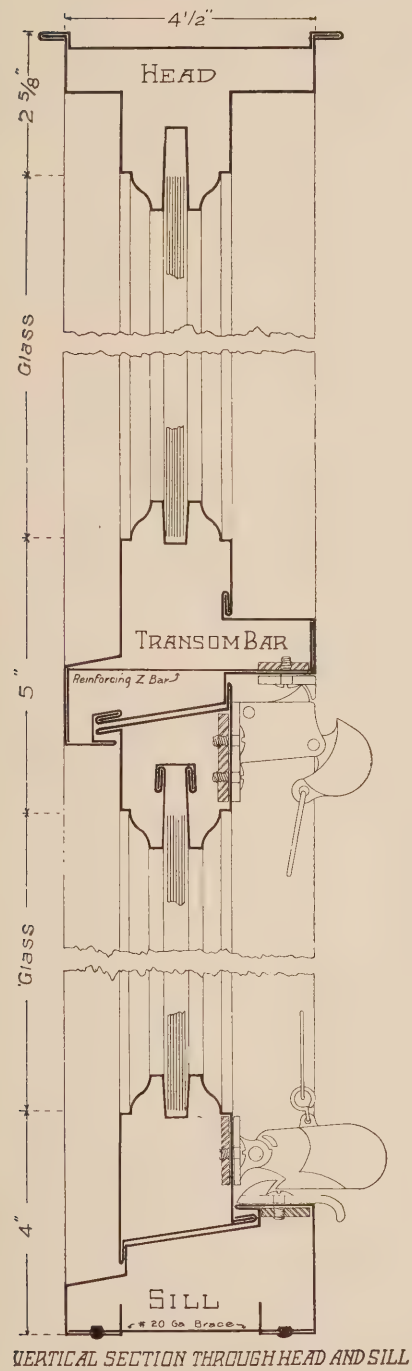


Fig. 1553.

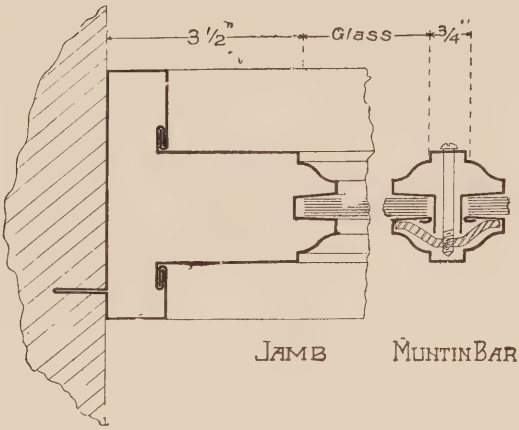


Fig. 1554.

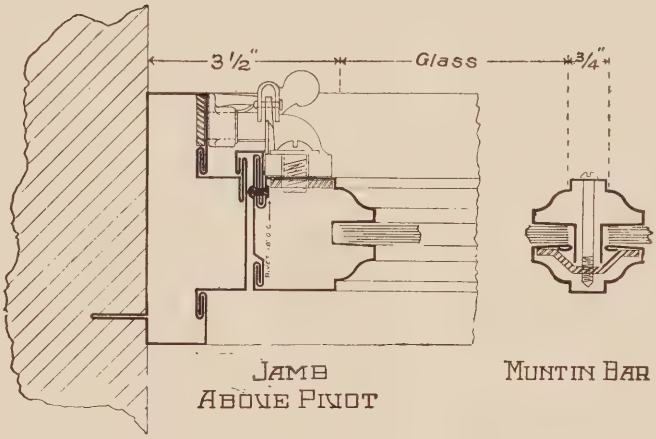


Fig. 1555.

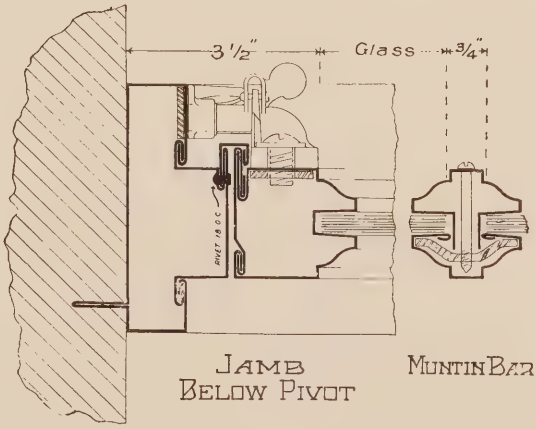


Fig. 1556.

Details of frame and sash where the lower sash is pivoted and upper stationary.

Double Pivoted Windows

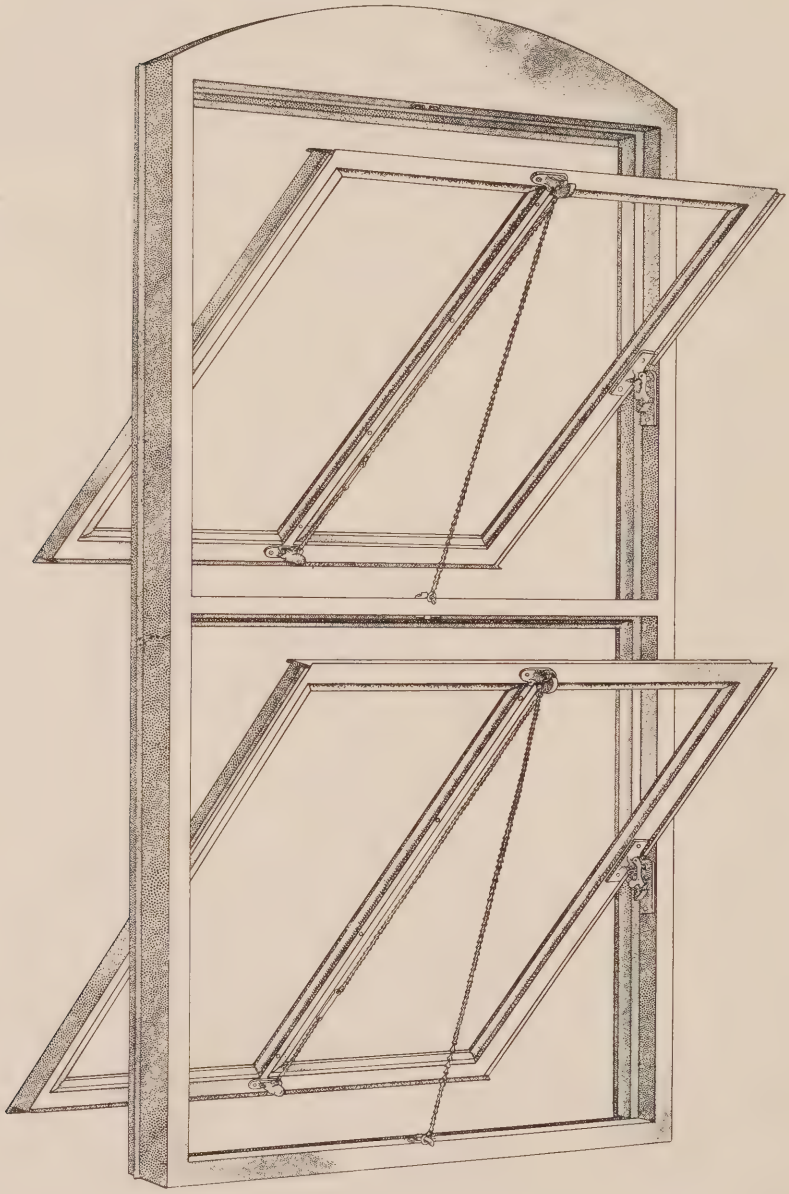


Fig. 1557.

Shows frame with both sashes pivoted. Where the **maximum** amount of ventilation is wanted, this type should be used. The glass on no other type of **window** can be cleaned on both sides as easily as on the Double Pivoted.

Double Pivoted Window

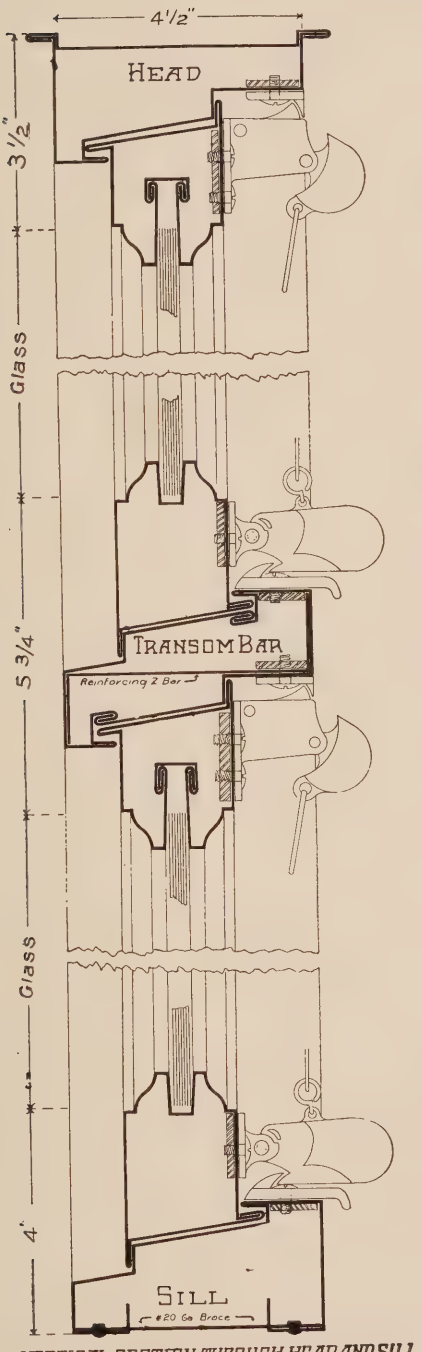


Fig. 1558.

Shows details of all the different parts of Double Pivoted Windows.

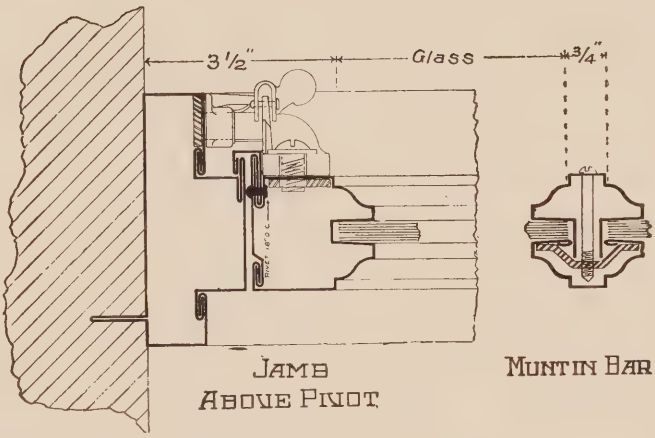


Fig. 1559.

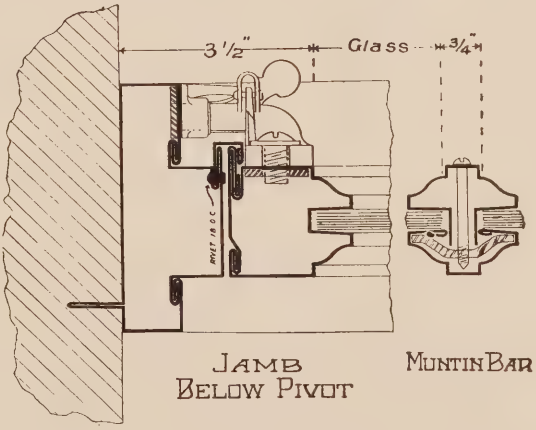


Fig. 1560.

Single Pivoted Window

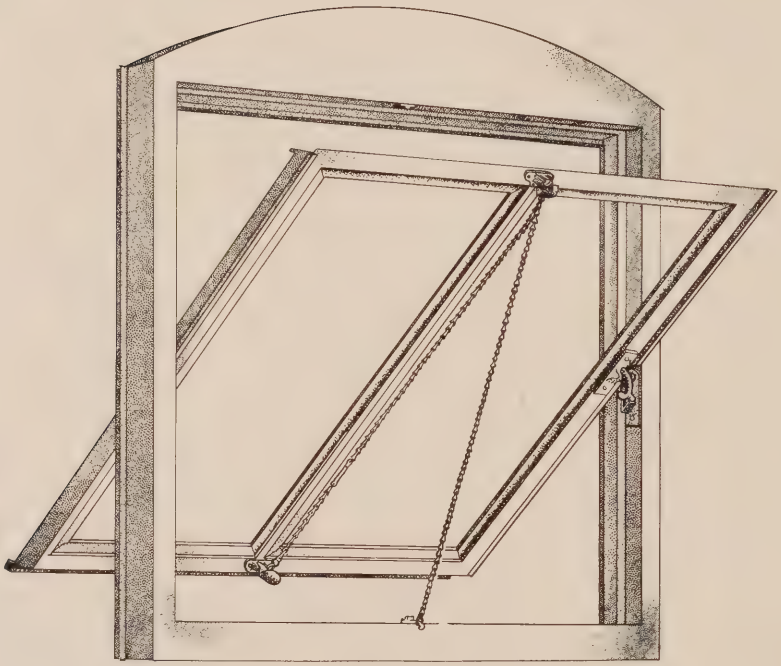
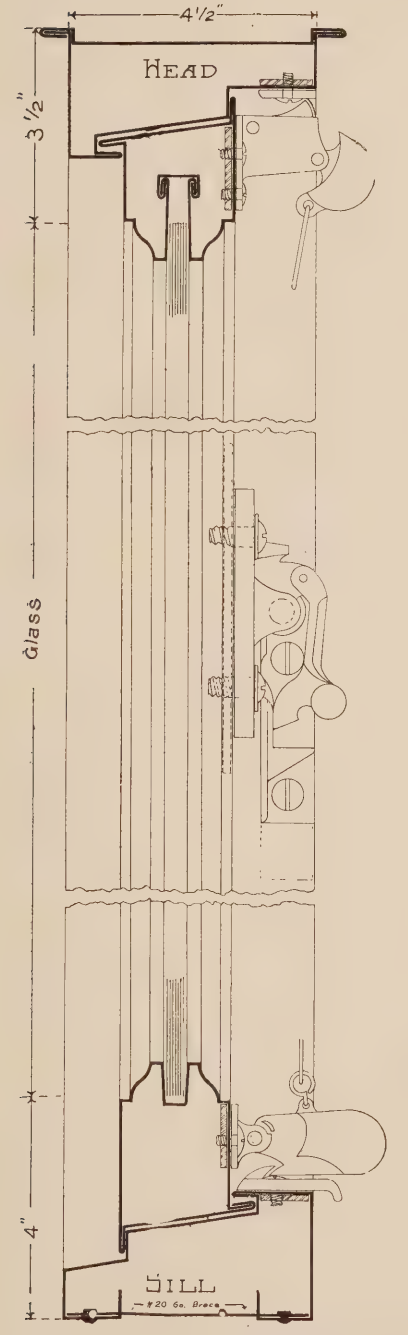


Fig. 1561.

Shows frame containing a single sash pivoted **horizontally** with automatic closing device. Can be made any size up to 5′ wide by 4′ 6″ high or 4′ 6″ wide by 5′ high. See details on opposite page.

Single Pivoted Window



VERTICAL SECTION THROUGH HEAD AND SILL.

Fig. 1562.

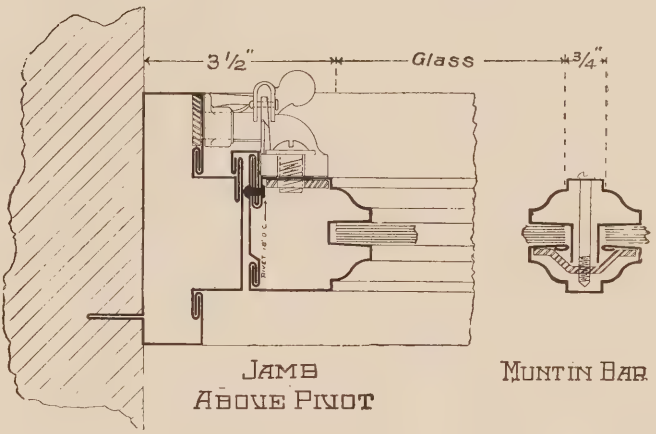


Fig. 1563.

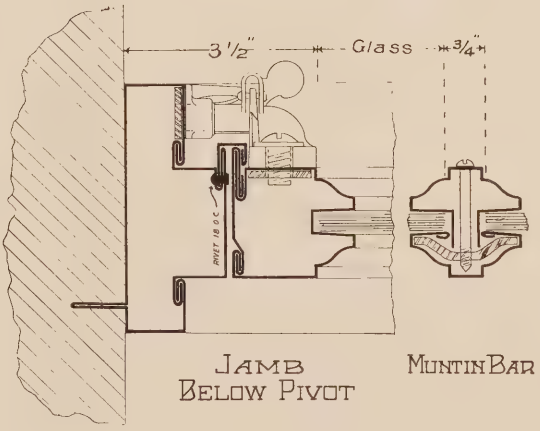


Fig. 1564.

Detail of frame and sash for single pivoted window.

Frame with Stationary Sash

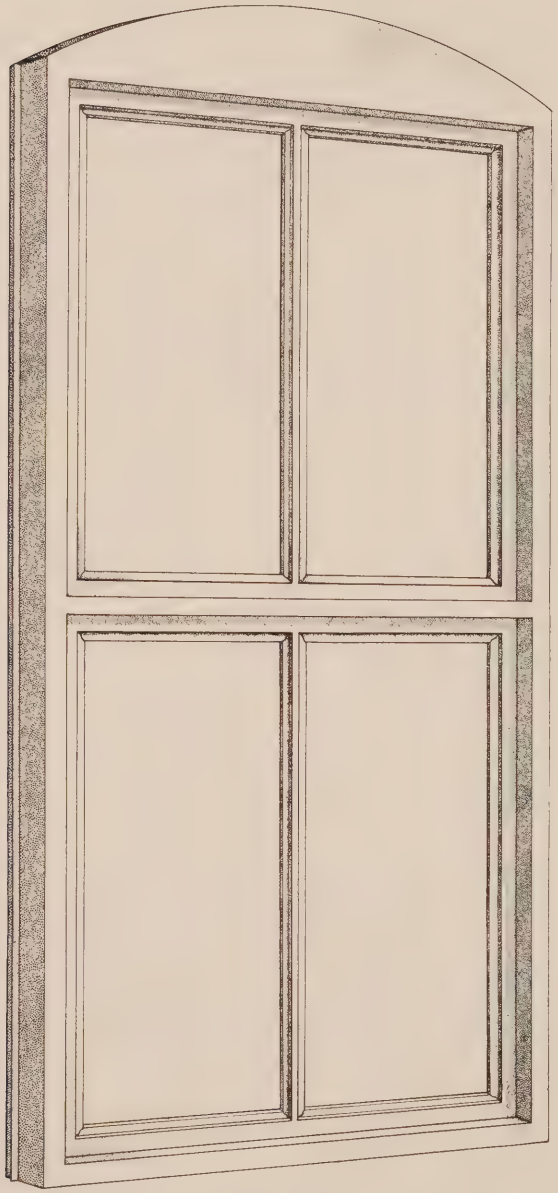
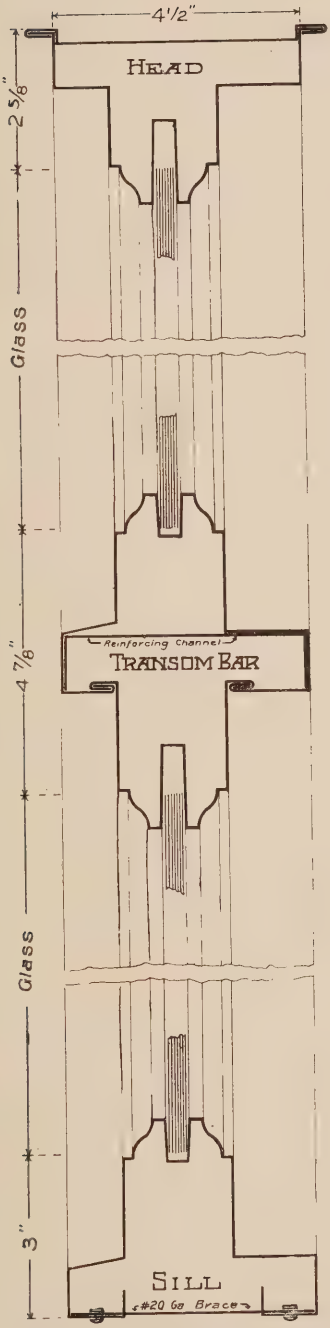


Fig. 1565.

This type of window gives the maximum amount of fire protection; it is also the cheapest. Whenever light is wanted and ventilation is not a factor, this window should be specified. Details on opposite page.

Frame with Stationary Sash



VERTICAL SECTION THROUGH HEAD AND SILL

Fig. 1566.

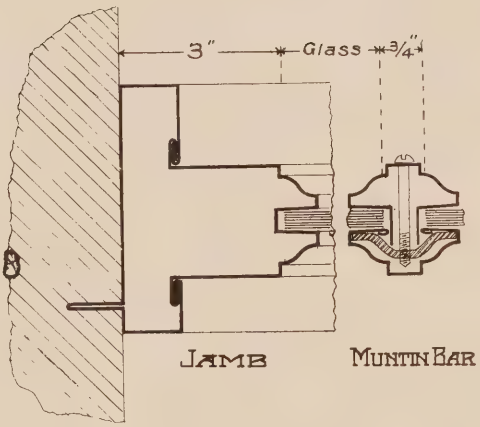


Fig. 1567.

Shows details and section of frame and sash for Standard Stationary Window. Can be made any size up to 5′ wide and 9″ high.

Pivoted Jamb Construction

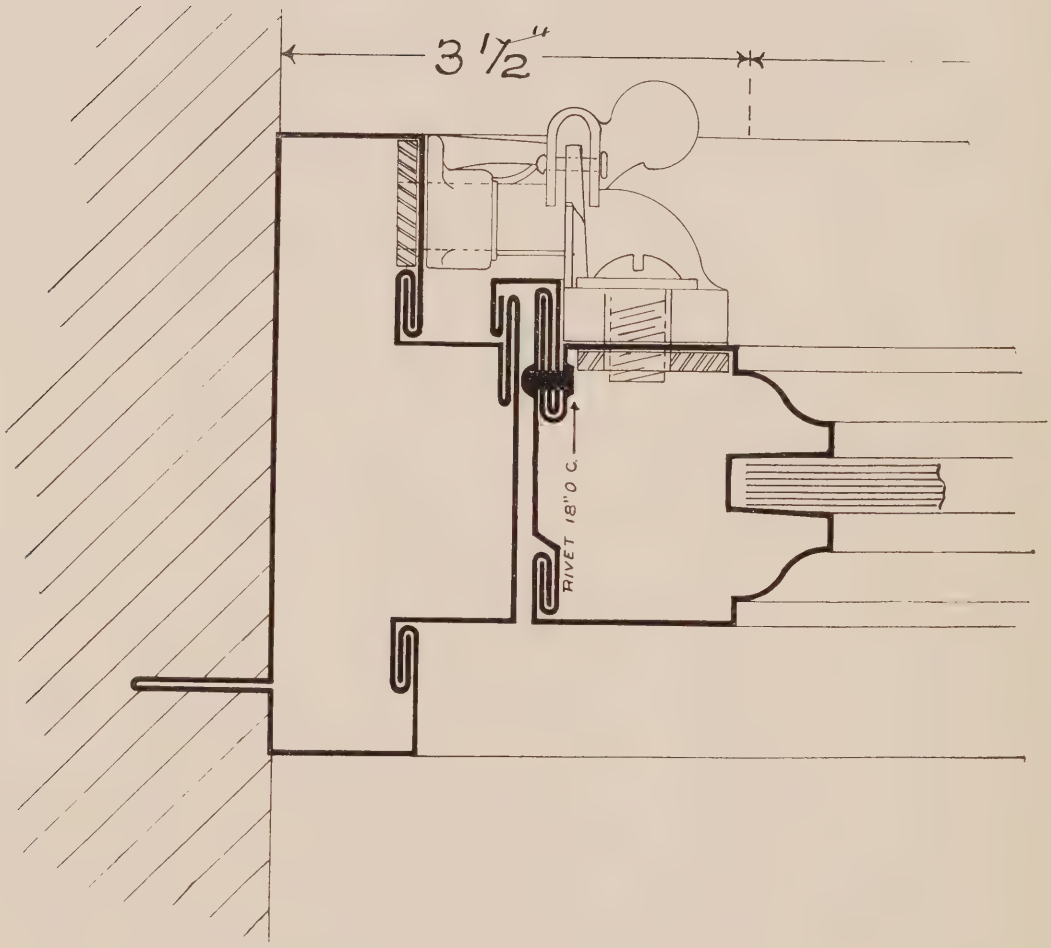


Fig. 1568.

Shows section of jamb and sash used in all types of windows when the sash is pivoted horizontally. No dust, cold air or fire can come between the sash and frame, as all openings are covered with a seal or weather strip. The tongue of this strip is inserted in a groove in the sash above the pivot and riveted. Below the pivot it is riveted in a groove in the jamb.

Stationary Jamb Construction

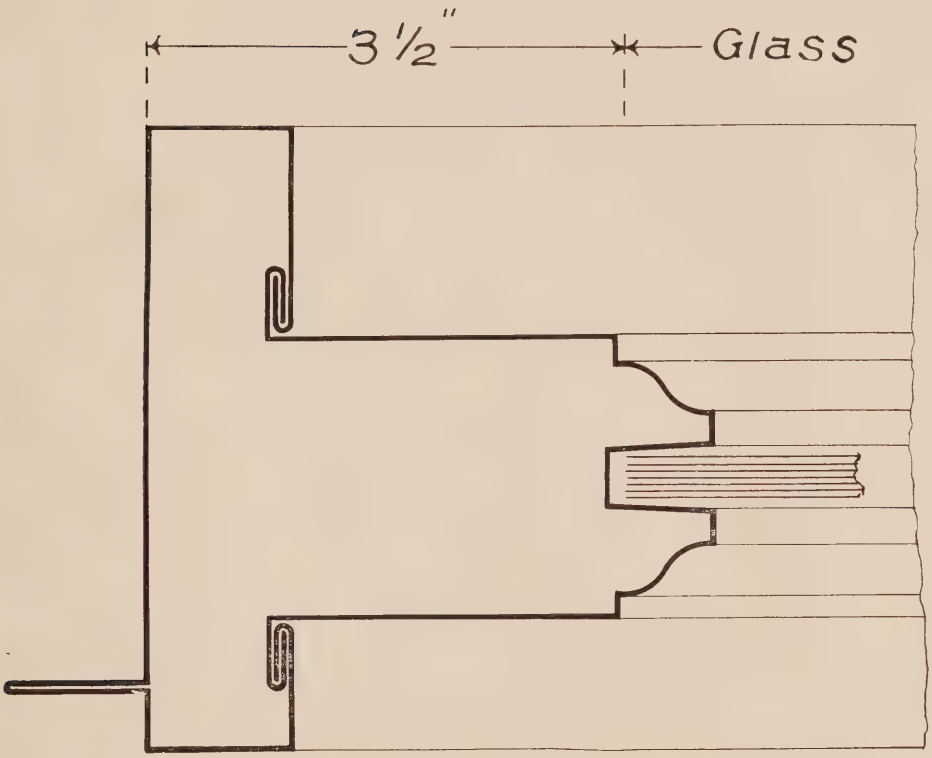


Fig. 1569.

Shows section of jamb and sash combined. This construction is used in all windows when the sash are made stationary.

Hinged Windows

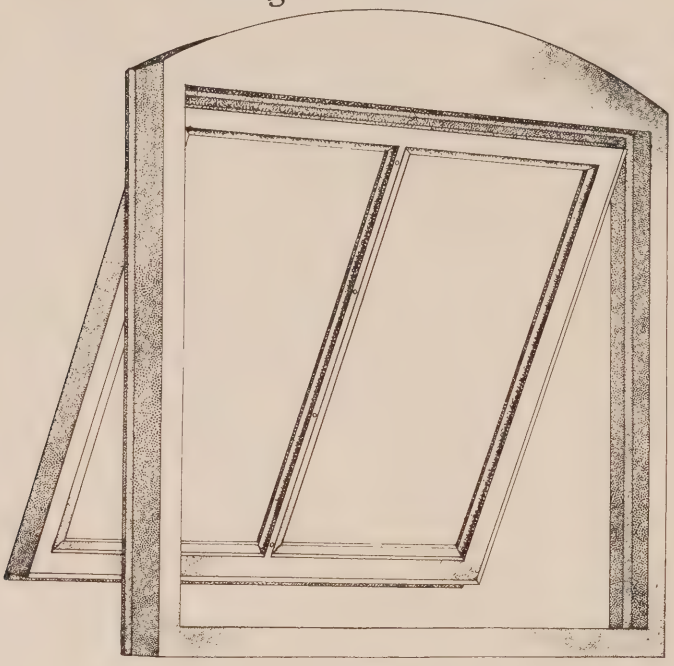


Fig. 1570.

Shows Frame with sash hinged at the top to swing out. This Frame is also made with the sash to swing in.

Fig. 1571.

Shows section of frame and sash with the sash hung at the top to swing out.

Fig. 1572.

Shows section of frame and sash with the sash hinged at the top to swing in.

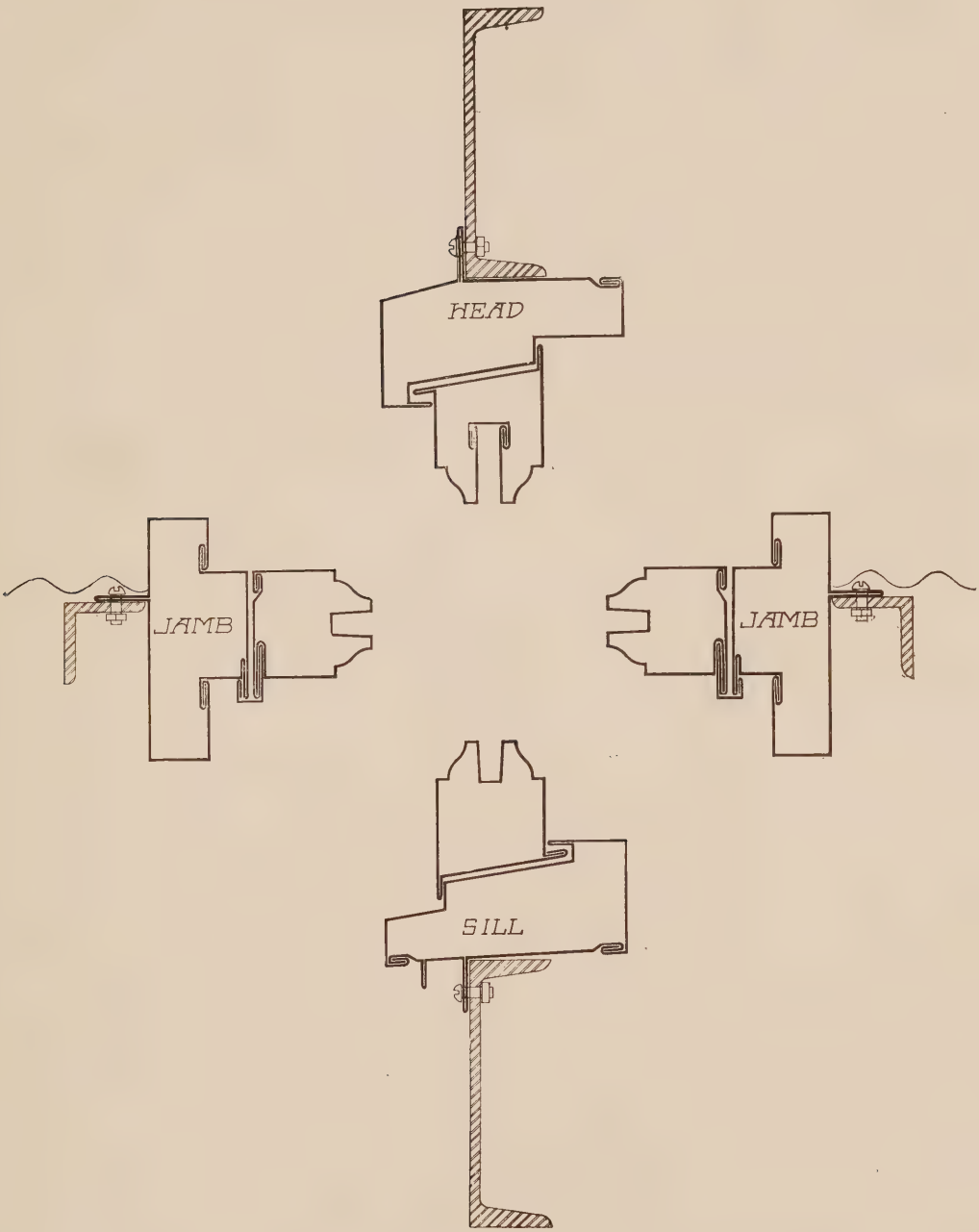


Fig. 1573.

Shows several methods of construction used in metal windows when same are erected in connection with structural iron work, corrugated iron or high rib plaster wall. Finns or flanges can be located to suit conditions.

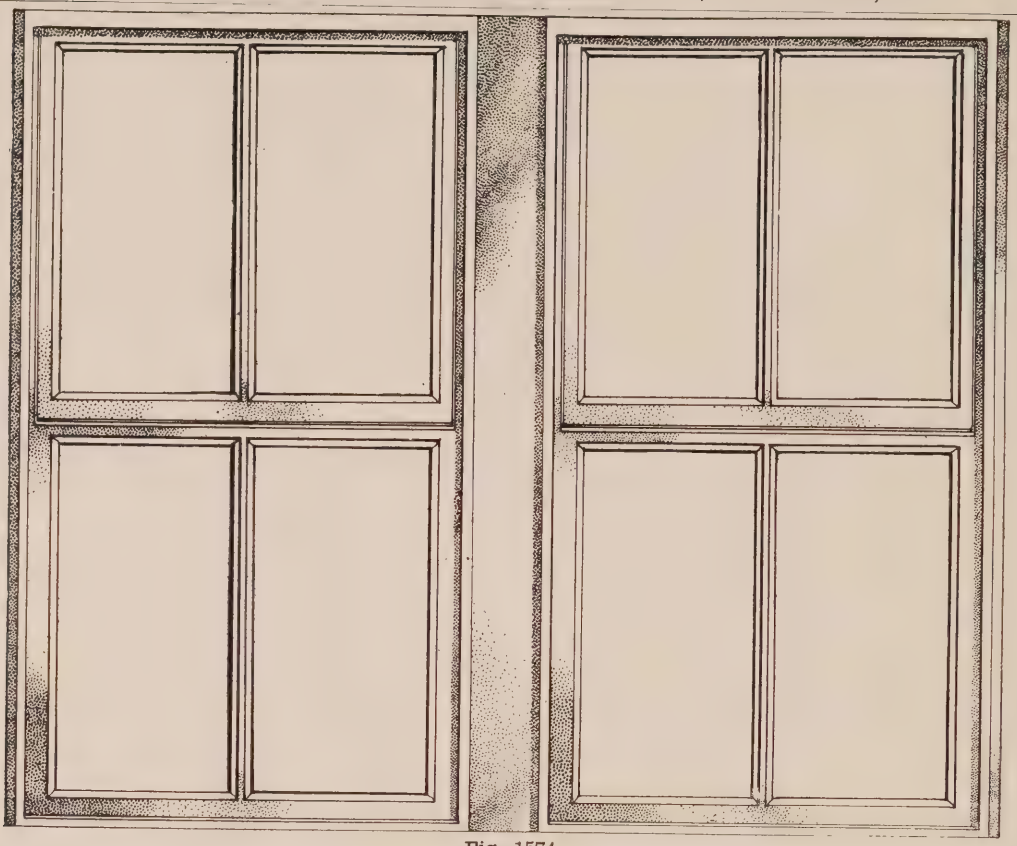


Fig. 1574.
Shows Pivoted Twin or Mullion Window with I-Beam Mullion and casing between.

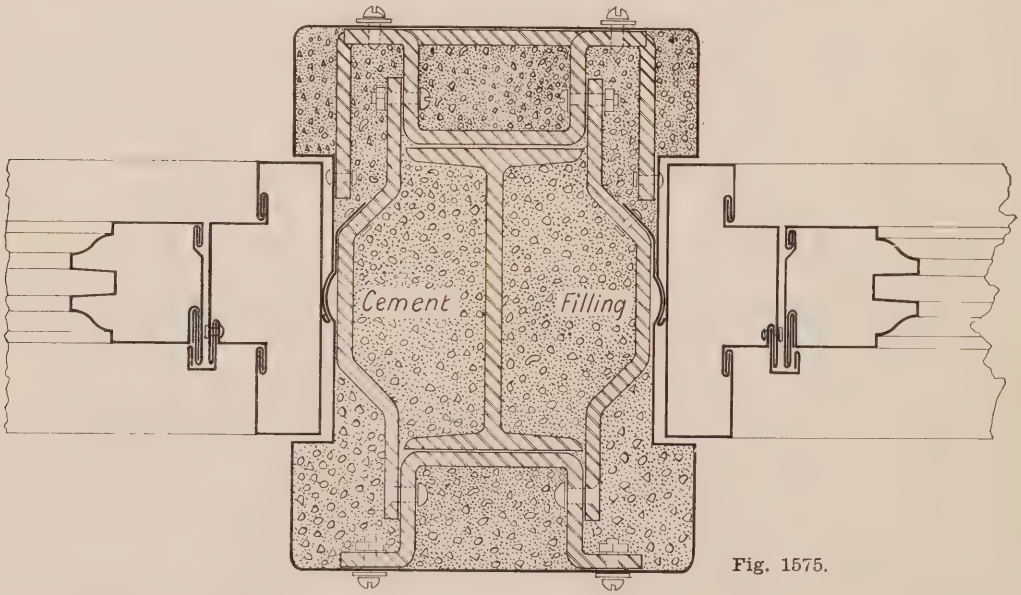


Fig. 1575.

Shows section of vertical I-Beam Mullion with braces, and sheet metal casing for Pivoted and Stationary Windows. Where the width of opening exceeds five feet, this construction is required by the Underwriters. In openings where the height does not exceed five feet and the width is not more than nine, the I-Beams are not required. Where I-Beams are used they must extend into the walls not less than two inches at each end. The depth of the I-Beam must be not less than 5", and must be surrounded by concrete or other approved material 2" thick on the flanges and 2½ next to the webb.

Horizontal Mullion Construction

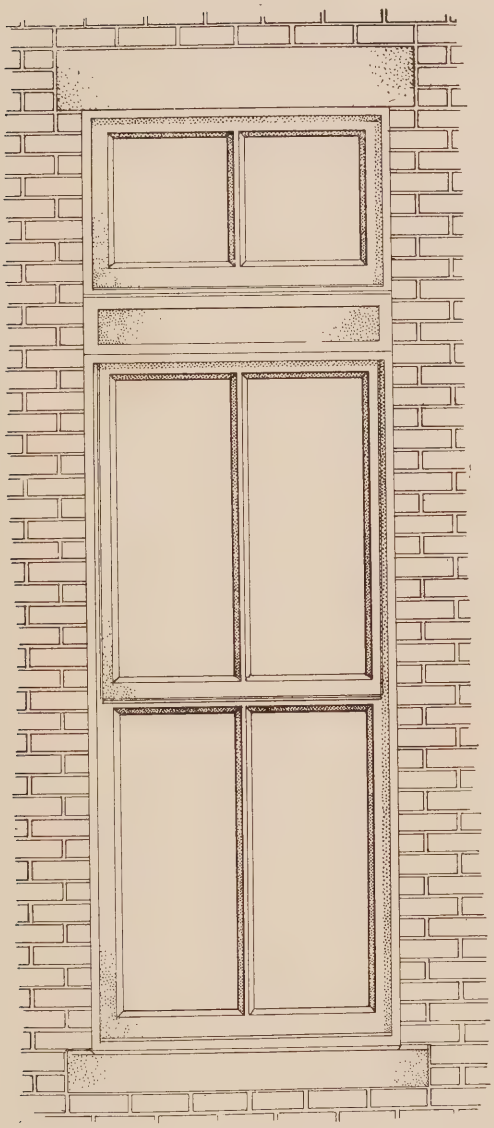


Fig. 1576.

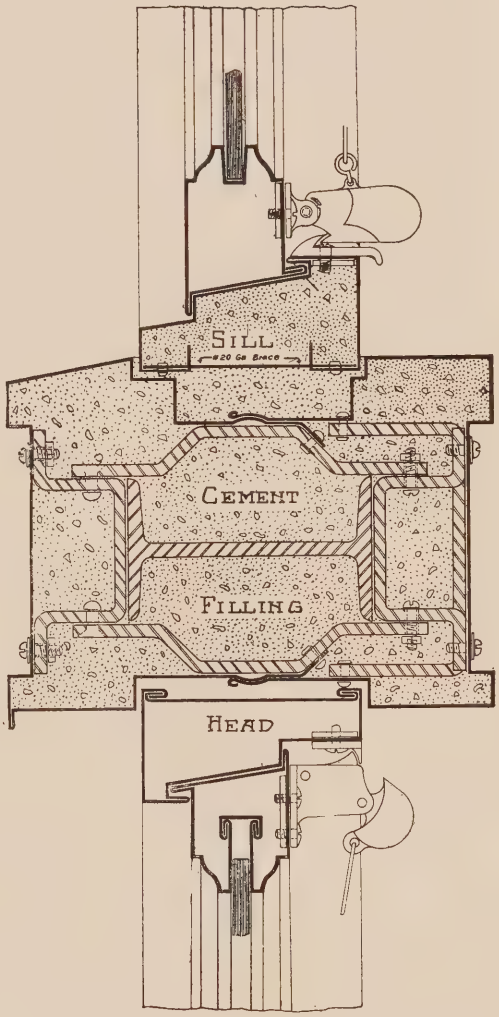


Fig. 1577.

Fig. 1576 shows Pivoted and Stationary Window with pivoted, hinged or stationary transom. When the height exceeds nine feet, it is necessary to insert a horizontal mullion as shown by Fig. 1577. Both ends of the I-Beam must extend into the walls not less than four inches. Unless specified otherwise, the frames are made flush on the inside.

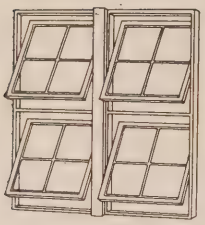


Fig. 1578.

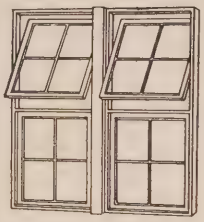


Fig. 1579.

Fig. 1580.

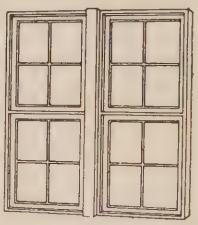


Fig. 1581.

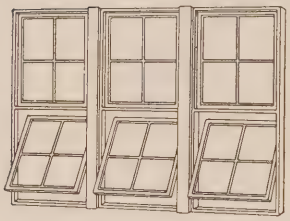


Fig. 1582.

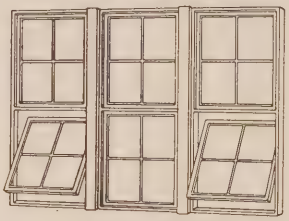


Fig. 1583.

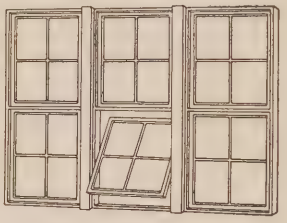


Fig. 1584.

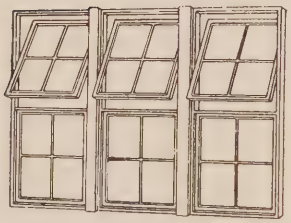


Fig. 1585.

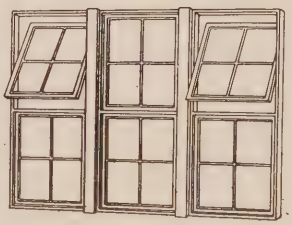


Fig. 1586.

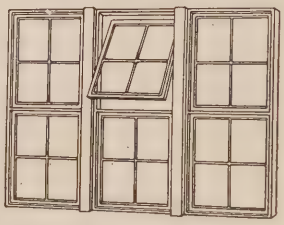


Fig. 1587.

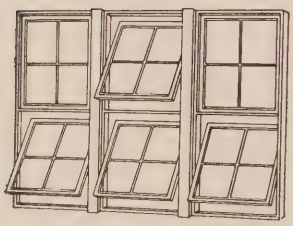


Fig. 1588.

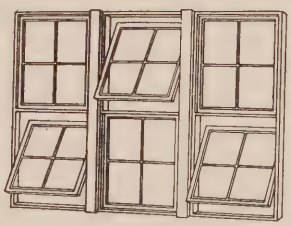


Fig. 1589.

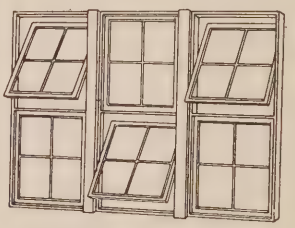


Fig. 1590.

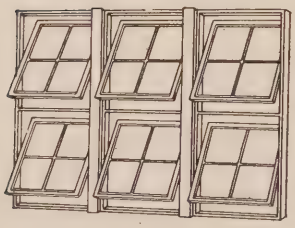


Fig. 1591.

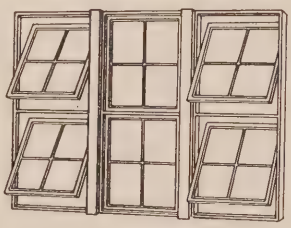


Fig. 1592.

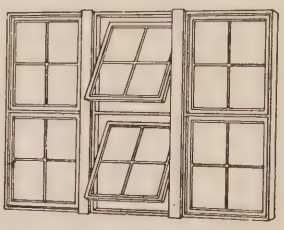


Fig. 1593.

Shows arrangements of different combinations of Pivoted and Stationary Windows. Mullions between windows are shown on page 38, Fig. 1575.

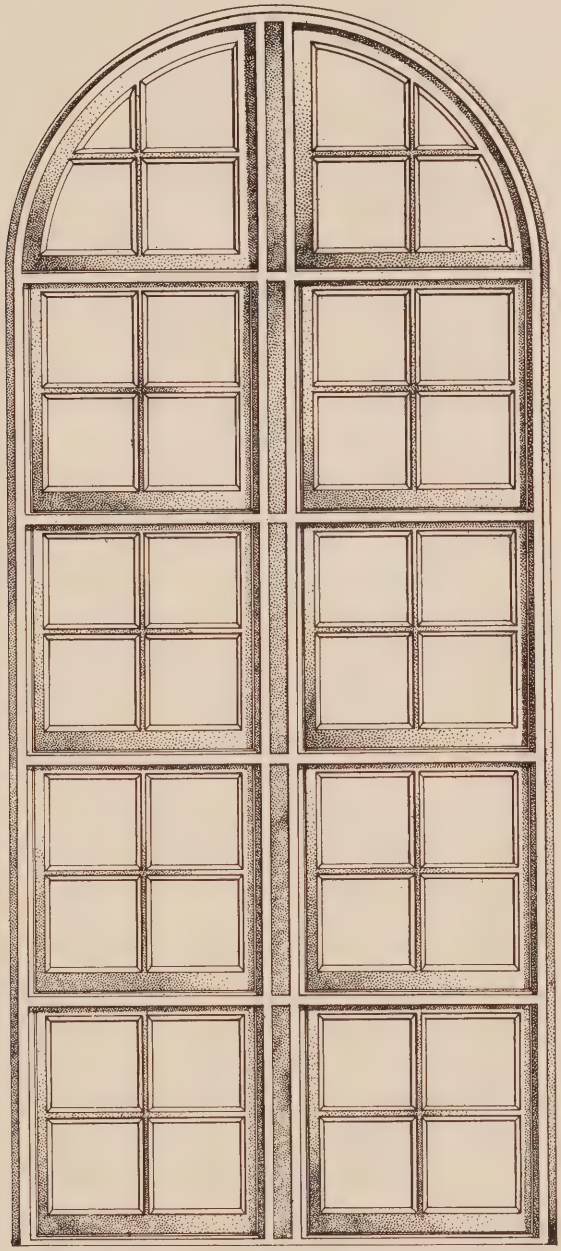
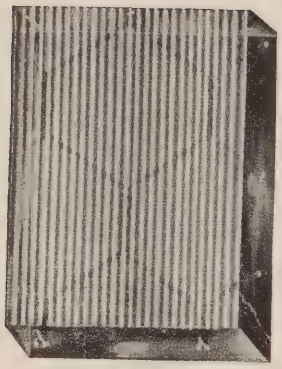


Fig. 1594.

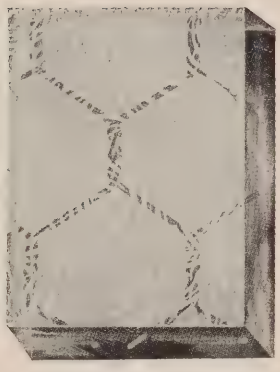
Shows large circular top Mullion frame with pivoted sash. The sash are opened and closed, with an operating device similar to that shown on page 50. There are no windows too large or too small for our equipment.

Wire Glass



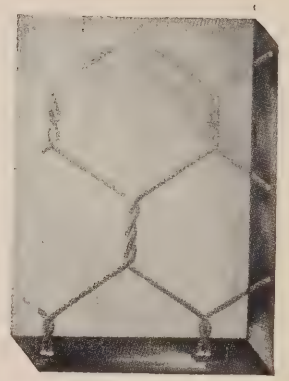
RIBBED WIRE.

Fig. 867.



MAZE WIRE.

Fig. 868.



POLISHED WIRE.

Fig. 869.

Glass acceptable to Underwriters must be at least ¼" thick at the thinnest point. There must be a No. 24 gauge wire mesh not larger than ⅞" imbedded in the glass midway between the two surfaces. The size of a single light of glass cannot exceed 720 square inches or be more than 48" in either dimension. Wire glass is either ribbed, rough, mazed or polished; the ribbed style being the most commonly used, but where a clear glass that can be seen through is desired, ¼" polished wire glass must be specified. In office buildings, hotels, stores, etc., it is customary to use polished wire glass in the lower sash; it is sometimes used in both sash. Wire polished glass admits clear unobstructed light; it does not, however, possess the remarkable diffusive quantities found in the ribbed or mazed wire glass. Sash are never glazed at the factory. When glass is wanted, same will be cut to size and shipped separately. The glazing of our sash at destination is easily accomplished by any handy man. We do not furnish putty, as same can be purchased just as reasonable at destination. In giving the size of glass, we state the width first.

Divisions of Glass

The following cuts—Figures Nos. 1595 to 1610—show how the glass may be divided in the different kinds of windows. In ordering, be sure to state how many lights are wanted for the entire opening. When the number of lights are not specified, we figure on windows containing lights of the maximum size allowed by the Underwriters.

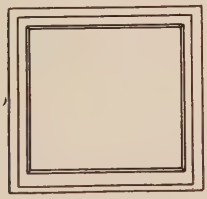


Fig. 1595.

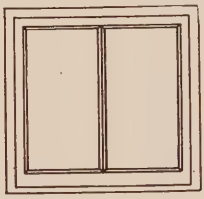


Fig. 1596.

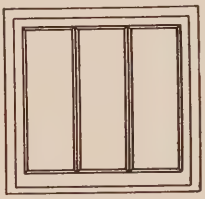


Fig. 1597.

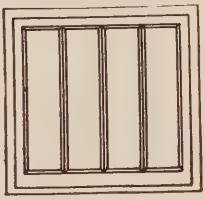


Fig. 1598.

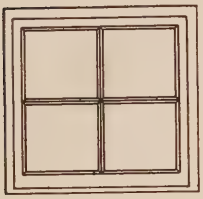


Fig. 1599.

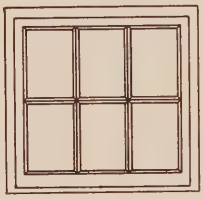


Fig. 1600.

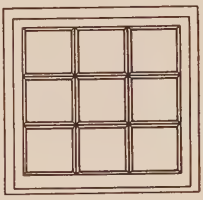


Fig. 1601.

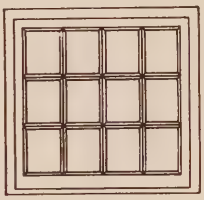


Fig. 1602.

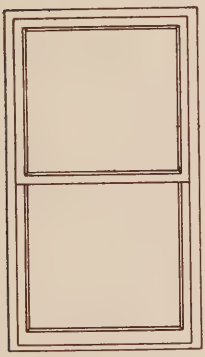


Fig. 1603.

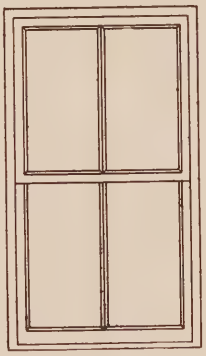


Fig. 1604.

Fig. 1605.

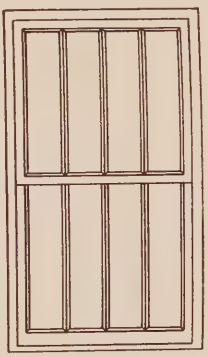


Fig. 1606.

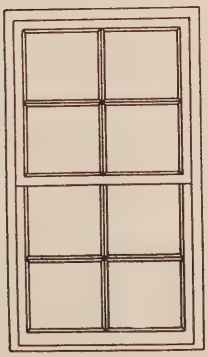


Fig. 1607.

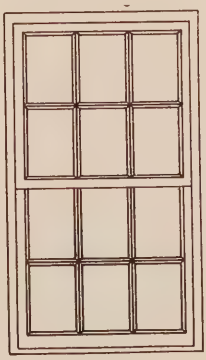


Fig. 1608.

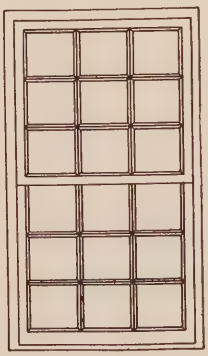


Fig. 1609.

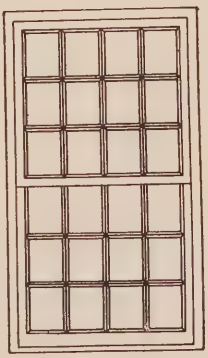


Fig. 1610.

Shows divisions into which glass may be arranged.

Window Heads

Fig. 1611.

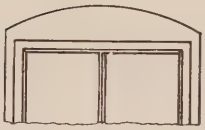


Fig. 1612.

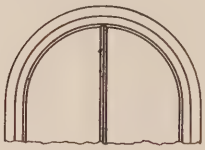


Fig. 1613.

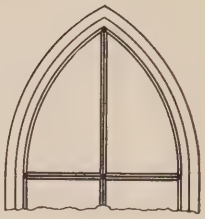


Fig. 1614.

Window frames may be made with **flat top** head and square top sash like Fig. 1611, or with segment heads and square top sash like **Fig. 1612**. Frames and sash like Figs. 1613 and 1614 cannot be labeled.

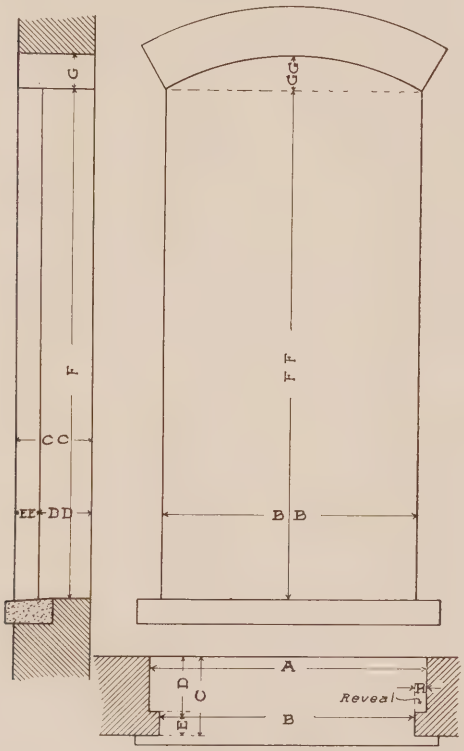


Fig. 1615.

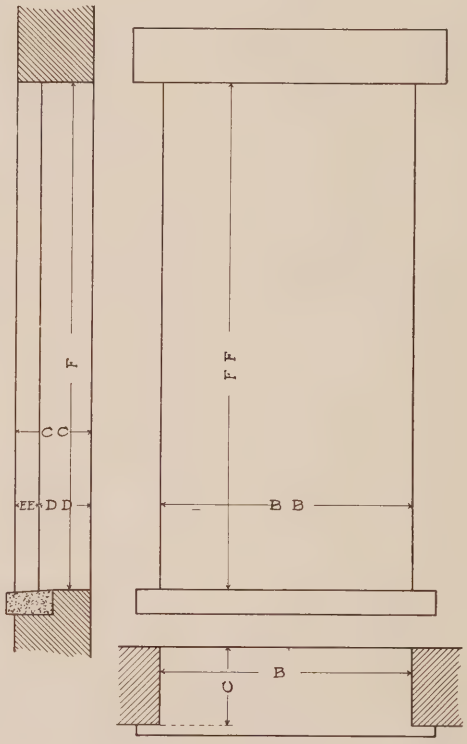


Fig. 1616.

Instructions for Taking Measurements

In giving measurements, the width dimension should be stated first. If windows are to be installed in opening of walls that are already built, say so definitely and state if the walls are shaped like Figs. 1615 or 1616. The measurements at A, B, C, D, E, F and G should all be given. Unless the height of arch (measurements at G or GG) is given, it is understood that the window will be provided with a flat top. The reveal must be 2½" or more to receive the jambs of Double Hung or Counterbalanced Windows. In old buildings where wood windows are to be replaced by metal, accurate full size sections through head, sill and sides should be given in addition to the above information, showing any woodwork that may remain to be covered with metal.

How to Order Windows

First: State number of openings.

Second: Give size as per instructions on page 44.

Third: State the kind of head wanted. See page 44.

Fourth: State kind of glass wanted and number of lights to each opening. See instructions on page 42.

For Your Information

Only those windows that come within the size specified by the Underwriters, and where the glass does not exceed 720 square inches, or where a single light is not over 48 inches in either dimension, can be labeled. The cementing of sills, sub-sills and all mullions must be done at the building, and is not included in our proposition.

When glass is ordered, same is cut to proper size and shipped separately. The chain and weights on Double Hung Windows are shipped separately. All windows are painted with a priming coat of red paint before they leave the factory. All hardware of every description is attached to windows.

The label is evidence of proper construction of the appliances at the factory. Prospective users should first ascertain from the Underwriters having jurisdiction which type of wired glass windows will be accepted in the location desired, and should make contracts, subject to approval by them, of the installation, glazing and automatic attachments.

None of our windows show mouldings or staff beads. Construction of our windows are such that we can furnish any design wanted. See page 18.

Fireproof Metal Windows are cheaper than wood windows with shutters; besides, shutters have to be opened for light and closed for protection; Metal Windows give protection all the time.

A circular setting forth logical reason and actual experiments why fireproof windows are better than standard fire shutters will be mailed on request.

All window frames and sashes of every description are made from No. 24 gauge galvanized sheets, unless specified otherwise.

Unless window bears the Underwriters' label, it has not been approved or inspected by them.

Complete instructions for glazing and erecting are furnished on request.

Skylights

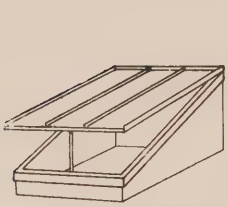


Fig. 713.

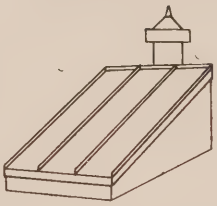


Fig. 714.

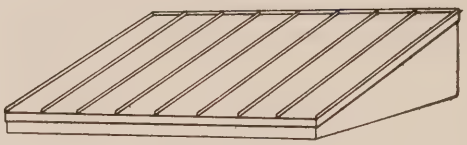


Fig. 701.

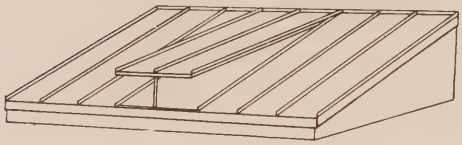


Fig. 710.

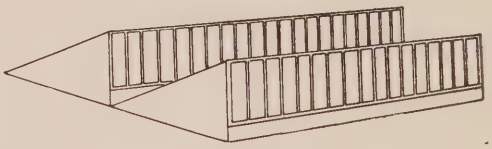


Fig. 711.

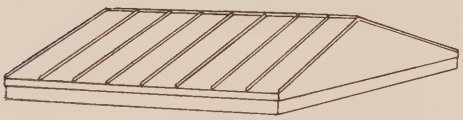


Fig. 702.

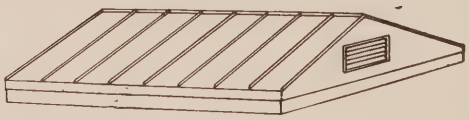


Fig. 703.

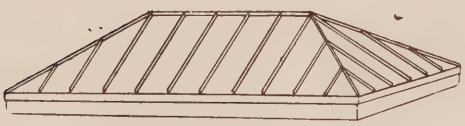


Fig. 705.

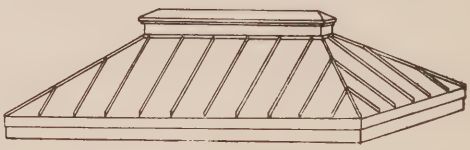


Fig. 706.

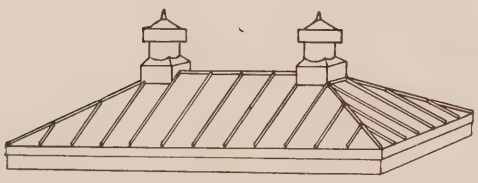


Fig. 707.

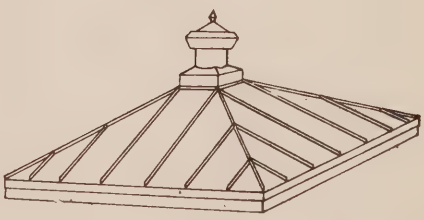


Fig. 704.

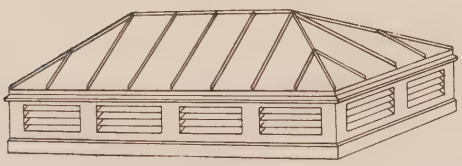


Fig. 708.

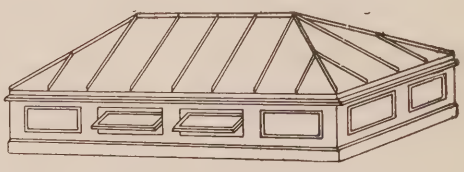


Fig. 715.

Made complete with ¼-inch ribbed glass, which we pack and ship in separate cases at buyer's risk of breakage.

Our skylights are so constructed that all condensation from glass is carried by gutters in the sash bars direct into the curb and discharged through weep holes on to the roof, without soaking between laps of metal, so common in skylight construction.

Caps are held in place with copper cleats.

We guarantee our Skylight Frames to be of the best material and workmanship, very strong, neatly fitted, LUGGED and soldered. The frames are made to fit over wood or structural steel frames.

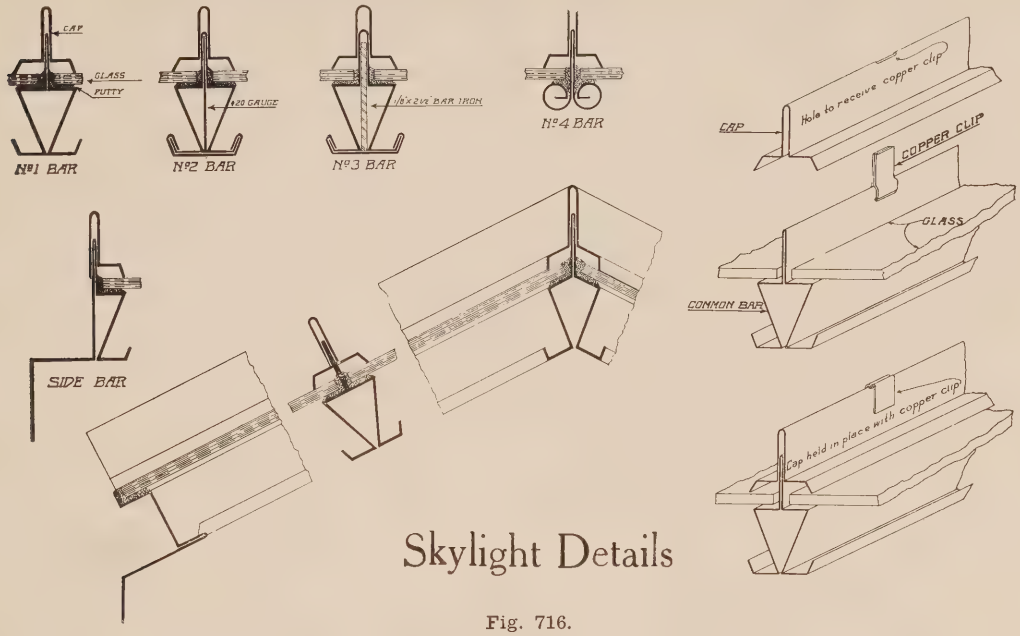


Fig. 716.

Shows sections of bars with and without reinforcement, also detail of curb and ridge. Bars longer than **6 feet are reinforced** with No. 20 gauge material, as shown by No. 2; bars longer than 10 feet are reinforced with **⅛"x2½" bar iron,** as shown by drawing No. 3.

All Skylights are made with No. 26 gauge unless specified otherwise. In ordering, give the outside **measurement of the** wood curb and the thickness of same. When ordering flat Skylights, state which way the water is to **run.**

SKYLIGHT PRICE LIST.

Size of Curb Outside	No. 701	No. 702	No. 703	No. 704	No. 705	No. 706	No. 707	No. 708	No. 709
3 x 3	$ 6.50	$ 9.00	$12.00	$17.00	$14.00	$17.00	$17.00	$46.00	$61.00
3 x 4	7.50	10.50	13.50	18.00	15.00	18.00	18.00	48.00	64.00
3 x 5	9.00	12.00	15.00	20.00	17.00	21.00	21.00	51.00	68.00
3 x 6	10.00	13.00	16.00	21.50	18.50	22.00	22.00	53.00	70.00
4 x 4	9.50	12.50	15.50	20.50	17.50	20.50	20.50	52.00	69.00
4 x 5	10.50	14.00	17.00	22.50	19.50	23.00	23.00	55.00	72.00
4 x 6	12.00	15.50	18.50	25.00	22.00	27.00	27.00	58.00	76.00
4 x 8	15.00	19.00	22.00	31.00	26.00	33.00	33.00	60.00	84.00
5 x 5	12.00	15.50	17.50	25.00	22.00	27.00	27.00	58.00	76.00
5 x 6	14.00	18.00	21.00	28.00	25.00	29.00	29.00	64.00	82.00
5 x 8	18.00	22.00	25.00	34.00	31.00	36.00	36.00	73.00	93.00
5 x 10	21.00	26.00	29.00	39.00	36.00	41.00	41.00	82.00	103.00
6 x 6	16.00	21.00	25.00	32.00	28.00	32.00	32.00	69.00	88.00
6 x 8	20.00	25.00	29.00	39.00	35.00	40.00	40.00	80.00	100.00
6 x 10	25.00	30.00	34.00	46.00	42.00	48.00	48.00	91.00	114.00
6 x 12	29.00	35.00	39.00	52.00	48.00	55.00	55.00	100.00	124.00
7 x 7	21.00	26.00	30.00	40.00	36.00	40.00	40.00	82.00	103.00
7 x 10	28.00	35.00	39.00	52.00	48.00	54.00	54.00	100.00	124.00
7 x 12	33.00	40.00	44.00	59.00	55.00	62.00	62.00	112.00	138.00
8 x 8	26.00	32.00	36.00	48.00	44.00	48.00	48.00	94.00	118.00
8 x 10	32.00	39.00	43.00	57.00	53.00	60.00	60.00	109.00	134.00
8 x 12	38.00	46.00	50.00	66.00	62.00	69.00	69.00	134.00	150.00
9 x 9	32.00	39.00	43.00	57.00	53.00	57.00	57.00	109.00	134.00
9 x 12	42.00	52.00	56.00	73.00	69.00	75.00	75.00	137.00	167.00
10 x 10	39.00	48.00	53.00	70.00	64.00	70.00	70.00	127.00	155.00
10 x 12	47.00	57.00	62.00	82.00	76.00	85.00	85.00	152.00	186.00
10 x 14	56.00	67.00	72.00	97.00	91.00	100.00	100.00	175.00	217.00
10 x 16	64.00	77.00	82.00	110.00	104.00	115.00	115.00	200.00	248.00
12 x 12	57.00	69.00	75.00	99.00	93.00	100.00	100.00	177.00	220.00
12 x 14	68.00	82.00	88.00	116.00	110.00	120.00	120.00	212.00	263.00
12 x 16	76.00	91.00	97.00	131.00	125.00	135.00	135.00	240.00	297.00
12 x 18	86.00	103.00	109.00	146.00	140.00	150.00	150.00	270.00	335.00
12 x 20	96.00	115.00	121.00	162.00	156.00	166.00	160.00	300.00	375.00

Prices include ¼-inch ribbed glass and **ventilators** where shown, but do not include wood curbs or putty. Discounts on application.

Skylights

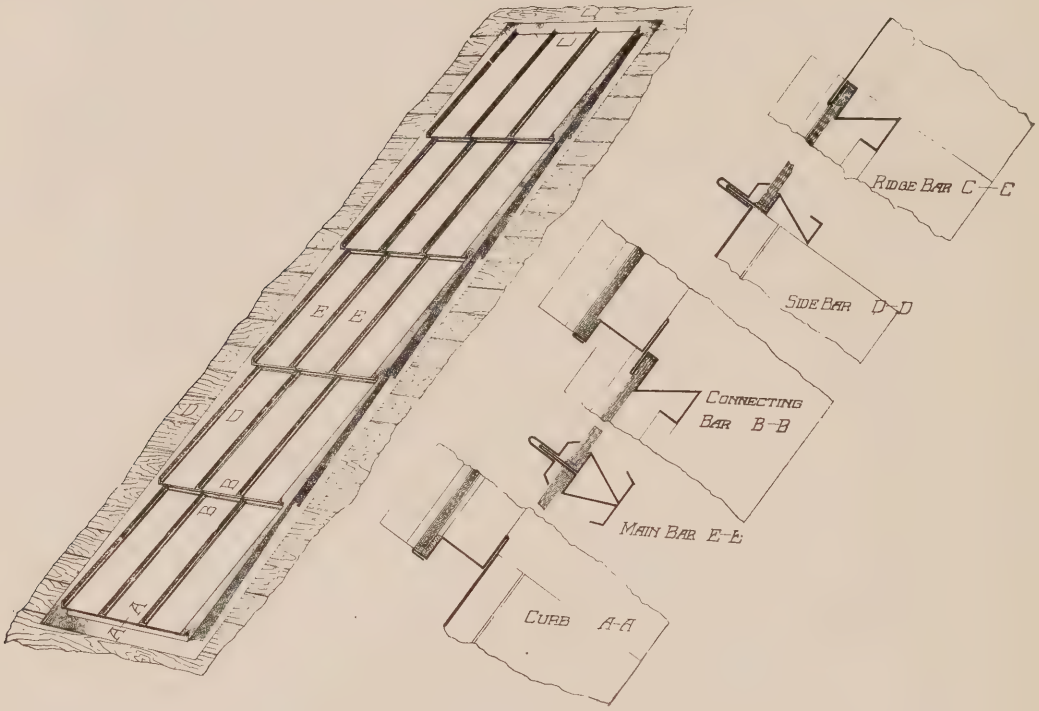


Fig. 717.

Shows elevation and sections of a special skylight designed for paper mills and other places where good light is required.

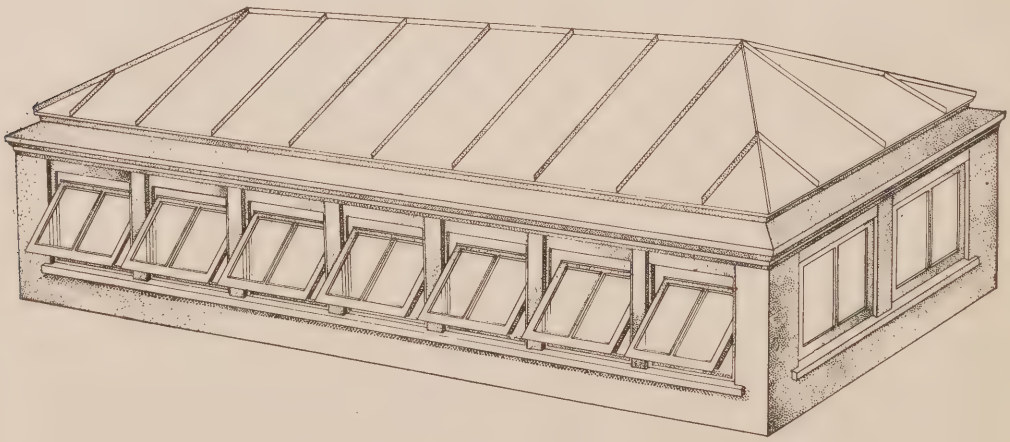


Fig. 718.

Shows Hipped Skylight with Monitor Sash. (See details on opposite page.) Sash are designed to open and close with operating device shown on page 50. Can be made to close automatically in case of fire.

Monitor Skylight

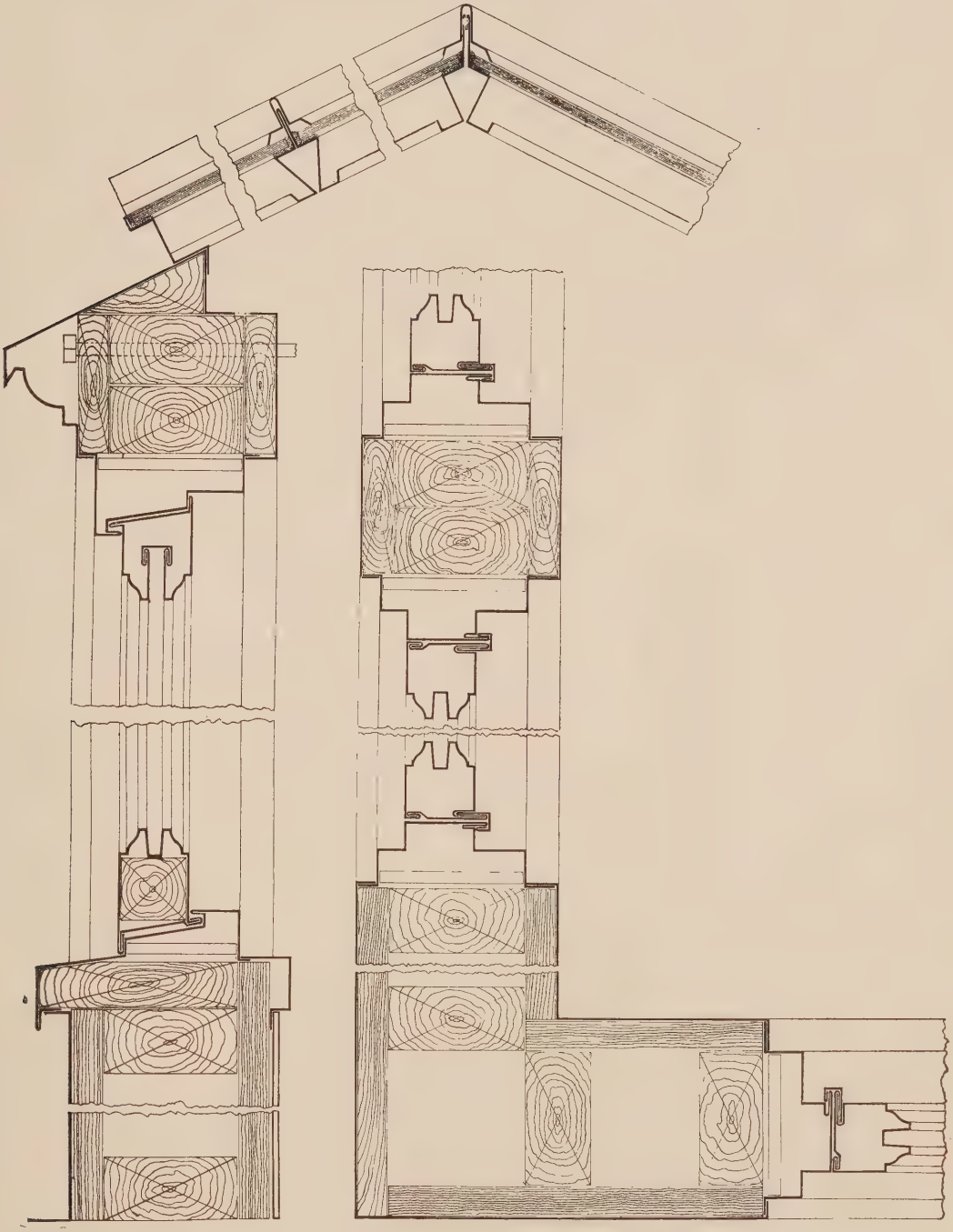


Fig. 719.

Shows section and plan of ventilating monitor and skylight on woodwork. For fireproof buildings, engine and boiler houses, etc., we use steel construction for reinforcement instead of wood.

Sash Operating Device

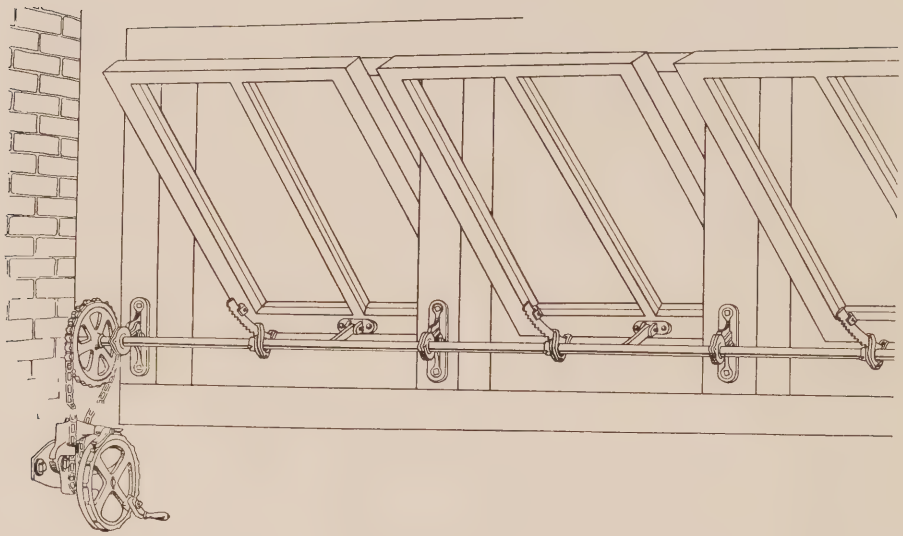


Fig. 720.

Shows sash operating device used in connection with Monitor Sash, Fig 718, page 48. This device is also used for lifting large skylights for ventilation and on window frames where a large number of sash are hinged or pivoted; see Fig. 1594, page 41. The extreme simplicity and ease of operation makes it appeal to architects and builders everywhere. Fifty sash can be opened and closed as quickly as one. One-inch pipe shaft is used for the transmission. With the patented Roller Bearings it is easy to put in place. Every part is carefully constructed and built to last as long as the building. There is nothing to get out of order when once installed and it is always ready for service.

When so specified we arrange the device with a fusible attachment so that the sash will close in case of fire.

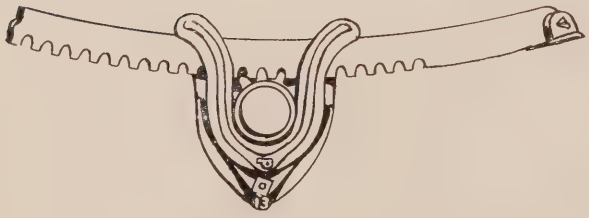


Fig. 721.

Shows Steel Rack Arm together with pinion and yoke. These arms are punched from bar steel. Made in lengths to suit the size of sash.

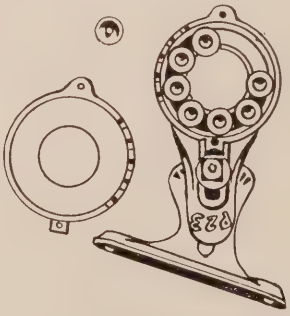
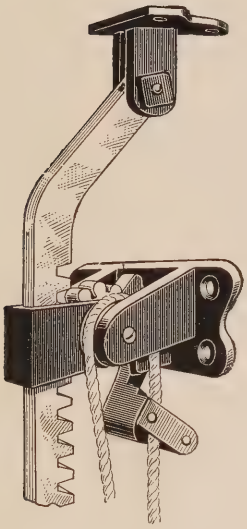


Fig. 722.

Shows patented Adjustable Roller Bearing. The adjustment of these bearings makes it possible to keep the shaft in perfect alignment.

Skylight Lifts



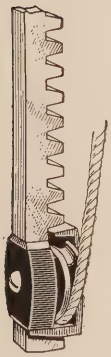


Fig. 723.

Shows lifting device for small skylights when ventilation is wanted.

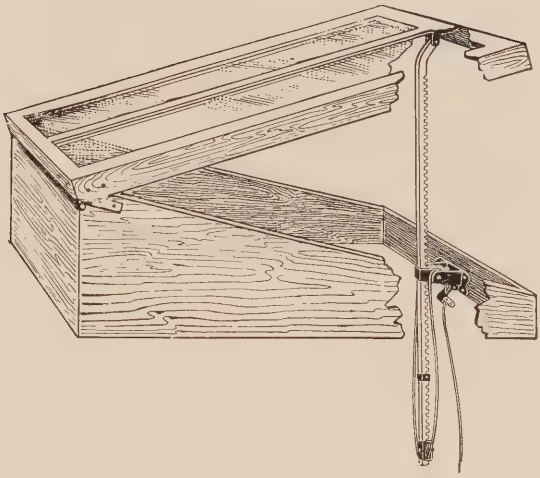


Fig. 724.

Shows small skylight with lifting device attached.

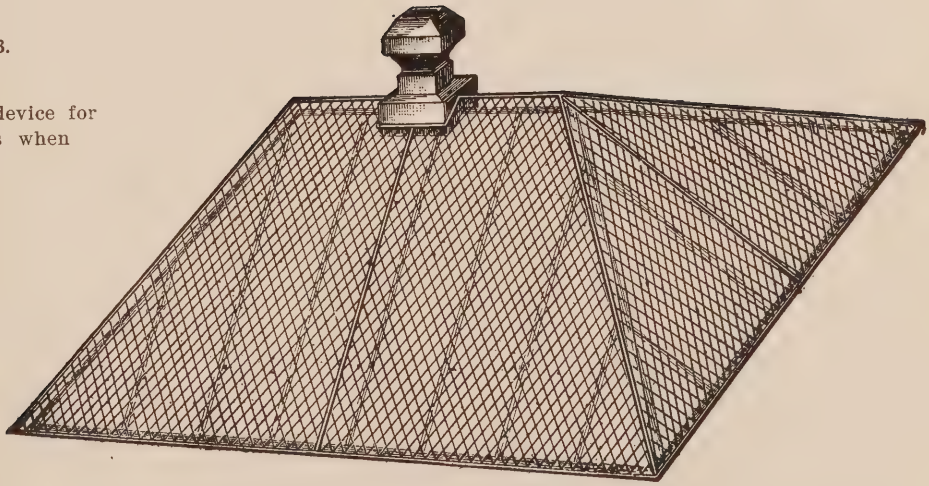


Fig. 725.

Wire Skylight Guards. These guards are made to suit skylights of all kinds. Single or Double Pitch Hipped or Turret Skylights.

Wire Guards

Any Size Wire Mesh or Frame

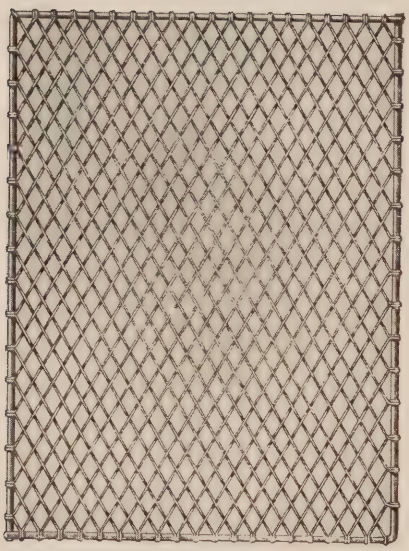


Fig. 605.

Shows wire guard in round iron frame.

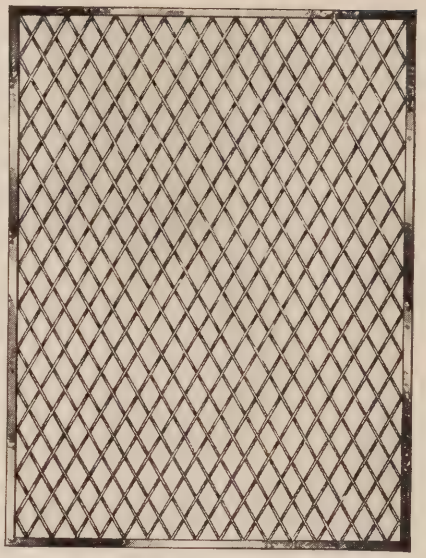


Fig. 606.

Shows wire guard in channel iron frame.

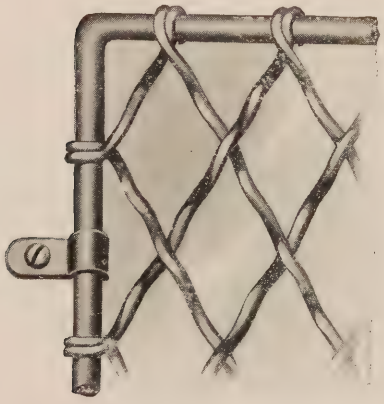


Fig. 607.

To be fastened with clips, as shown, or staples.

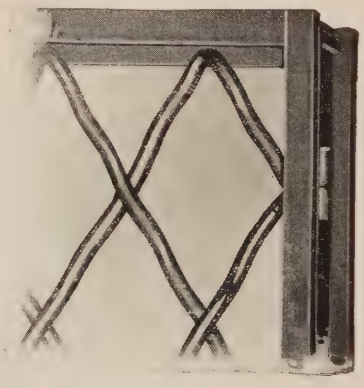


Fig. 608.

To be fastened with screws.

Wire guards for all purposes, any shape, painted any color desired. When ordering wire guards, give width first.

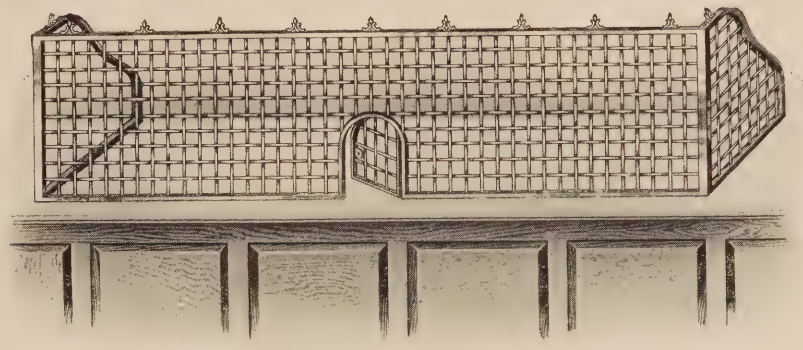


Fig. 609.

Desk Guards and Wire Partition Railings for banks, offices, stock rooms, etc. Any size wire **mesh** or frame. Made from brass bronze or iron in any finish.

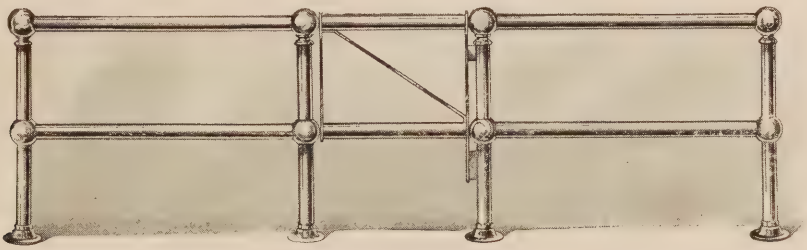


Fig. 610.

Brass Railings and Fittings for any purpose, any size.

Fig. 611.

Bronze Name Plates.

Fig. 612.

Fig. 613.

Shows Wicket Design.

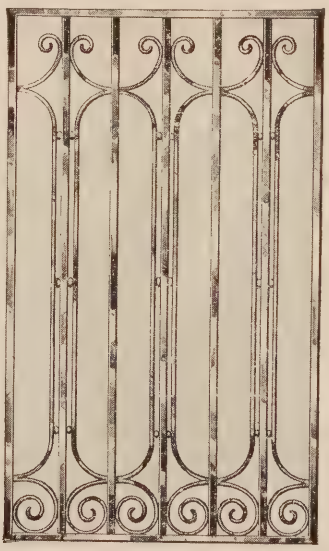


Fig. 614.

Shows Grille Design.

Grilles and Wickets made from brass, bronze or steel, any size, finish or design.

Signs and Tablets

Fig. 615.

Shows Applied Settee Sign.

Fig. 616.

Shows Cast Brass Sign.

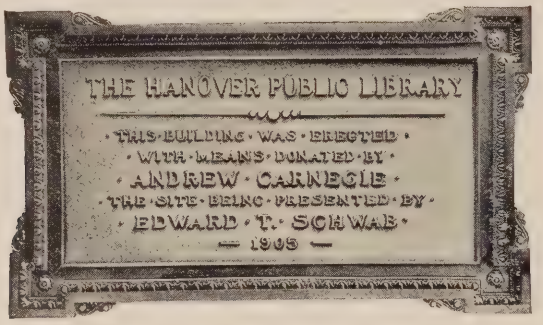


Fig. 617.

Shows Cast Bronze Sign.

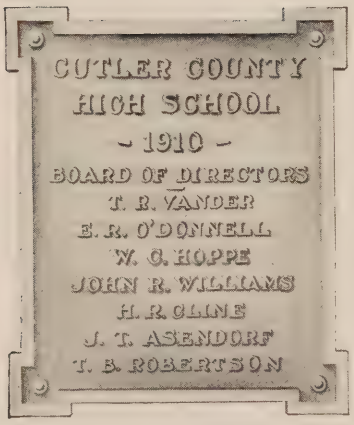


Fig. 618.

Shows Applied Settee Sign.

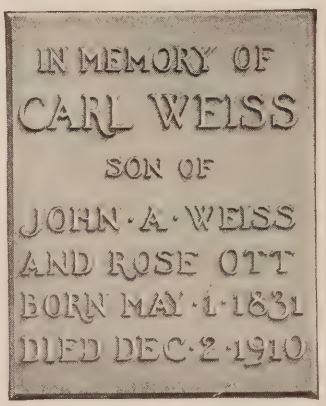


Fig. 619.

Shows Bronze Tablet.

Brass and Bronze Signs and Tablets, any size, cast or wrought.

Bronze Doors

For all Purposes. Solid or Built Up

Fig. 621.

Shows suggestion for Bronze Door.

Write for price on brass and bronze signs, memorial tablets, doors for banks and public buildings, counter screens for banks, offices, etc., safe deposit railings, check desk trimmings, grilles and wickets, railings for theatres, stairways, areaways, etc., kick and push plates, door and window guards, thresholds, etc.

Fire Doors

To reduce your insurance and obtain safety from fires, it is not only necessary to protect the opening in the outside exposed walls, but all openings in dividing walls and partitions should be made fireproof. The openings to stairways, elevators, and all vertical shafts should be protected.

Due to the special requirements of every individual building, it is practically impossible to adhere to any standard door. We are in a position to make every known type of standard or special Fire Door. Our facilities are excellent for this class of work and our equipment on a par with any factory in the country.

The great importance of fire walls in preventing a spread of fire, and the fact that they are liable to be severely exposed to fire for considerable periods, makes it essential that all openings in such walls be protected by the most efficient methods.

The standard tin-clad fire doors are designed for this purpose. Doors should be installed on both sides of wall. Constructed thus, they furnish a high degree of resistance to fire and to the transmission of heat for long periods of exposure, and resist fire streams well.

Tin Clad Fire Doors cannot be made to contain more than eighty square feet.

Representatives of the Insurance Inspection Bureaus should be consulted in regard to type of doors, also to size and style of openings, before making up specifications.

Openings in Vertical Shafts

Enclosures to vertical openings through buildings are next in importance to fire walls in preventing the spread of fire, and require the use of fire retardants of a high order at all openings. While they are subject to fire exposures of the same severity as fire walls, the conditions in these situations in buildings are such that a single fire retardant can be safely employed at each wall opening in standard shafts.

Openings in Corridor and Room Partitions

Partitions used for the subdivision of fire sections of buildings, while of less importance from the fire protection viewpoint than fire walls and enclosures to vertical communications through buildings, are of great value in preventing the spread of fire through the building itself. Openings should be provided with fire retardants, which are capable of furnishing a substantial barrier to the passage of fire, and which fulfill all service requirements, but which does not possess the qualifications for a protection to openings in fire walls and vertical shafts.

Standard Tin Clad Fire Doors

Incline Slide

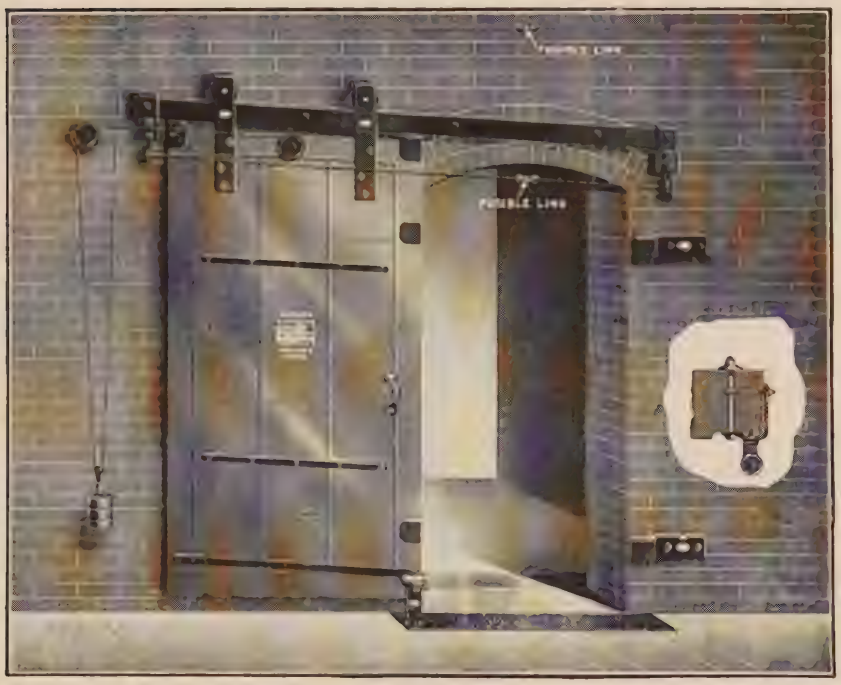


Fig. 801.

Inspected, labeled and tagged under the supervision of the Underwriters' Laboratories, Inc.

Single Swing Overlap

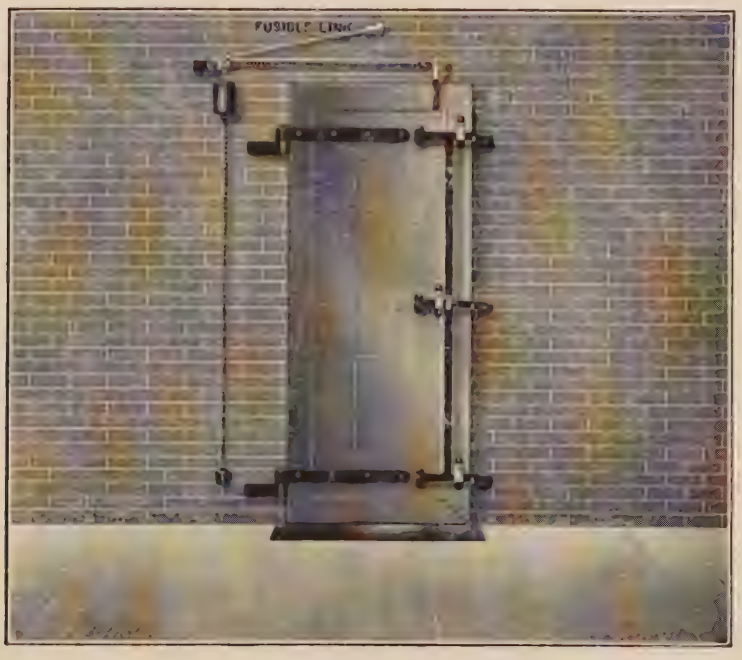


Fig. 802.

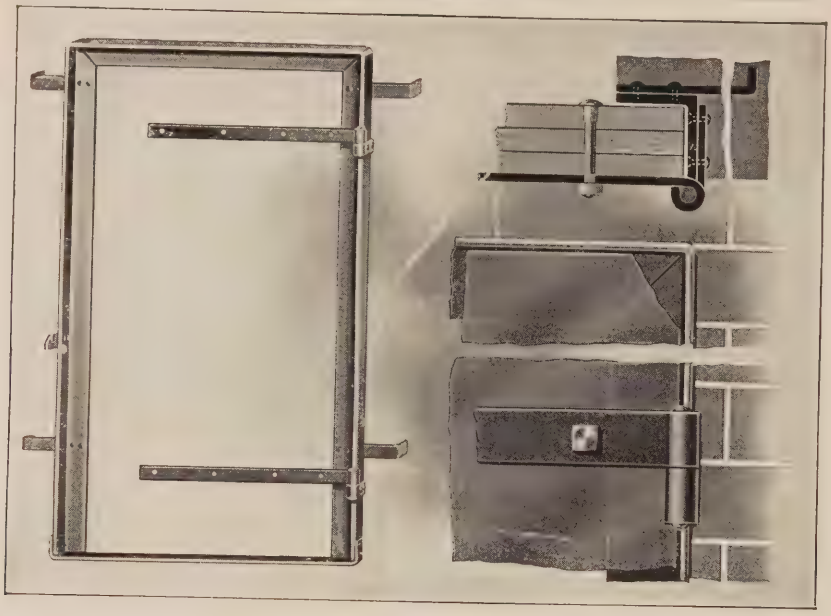


Fig. 805.

Shows frame made to set into the wall as the wall is built, and is especially recommended for the reason that it has a broad surface for the door to close against, thereby most effectually cutting off the exposure.

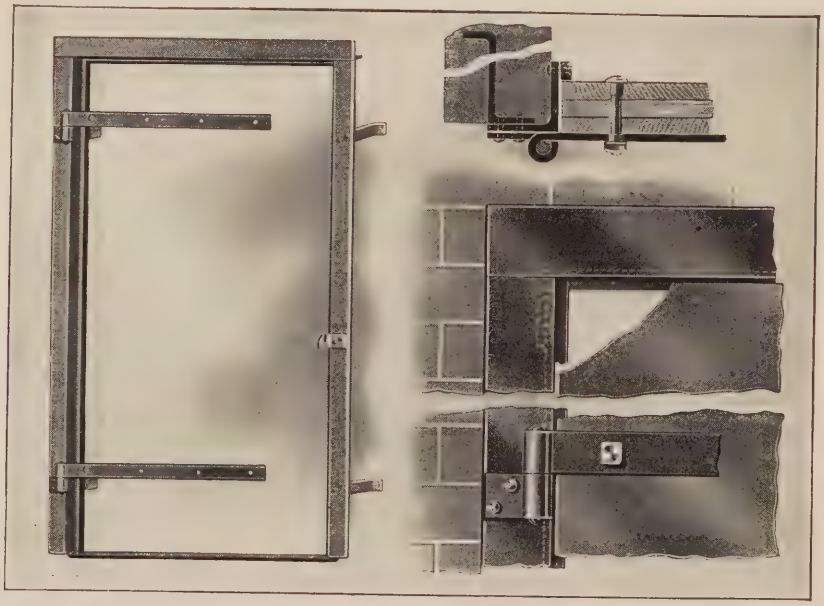


Fig. 806.

Shows frame made primarily for use in old walls.

Price List.	Width of Opening. 3 ft.	4 ft.	5 ft.	6 ft.
Frame Fig. 805 Single Door.....	$15.00	$16.00	$17.00	$18.00
Frame Fig. 805 Double Doors.....	17.00	18.00	19.00	20.00
Frame Fig. 806 Single Door.....	18.00	19.00	20.00	21.00
Frame Fig. 806 Double Doors.....	20.00	21.00	22.00	23.00

Above prices are for openings 7 ft. high or under. For frames higher than 7 ft. add $1.00 per foot. For frames with arched top add $5.00 for each opening. Price includes hinges.

Fire Shutters

Fig. 807.

Standard Shutters should be used at all windows exposed to other divisions of the same group of buildings, or to property owned by others. Money invested in Standard Shutters pays big interest in reduced premiums.

National Standard Double Lock Fire Proof Doors and Shutters

Bearing Inspection Labels of Underwriters' Laboratories

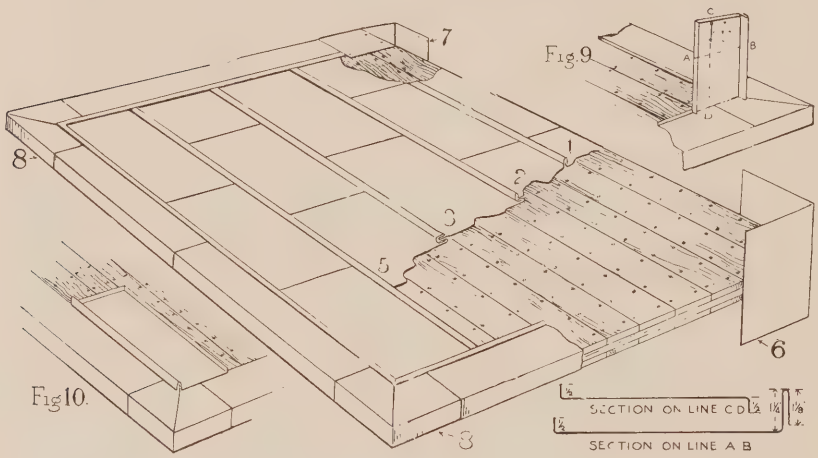


Fig. 814.

Unless Doors and Shutters bear labels, they are not inspected by Underwriters' Laboratories, Inc.

List Price, Doors and Shutters Only

Three-ply doors, 2½" thick with National Standard double lock joint tinning, using 14"x20" I. C. 113-lb. plates, per square foot..... $0.70

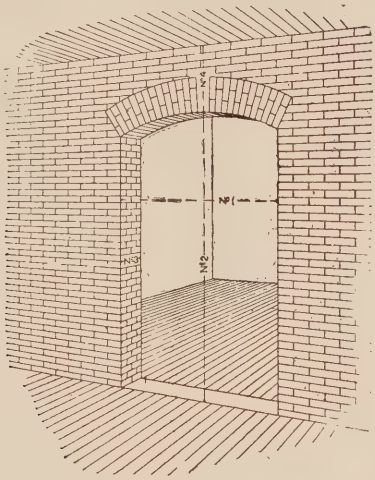
Three-ply doors, 2½" thick with Commercial single lock joints, using 14"x20" I. C. 108-lb. plates, per square foot..... $0.60

Two-ply shutters, 1¾" thick, with National Standard double lock joint tinning, using 14"x20" I. C. 113-lb. plates, per square foot..... $0.60

Two-ply doors and shutters, 1¾" thick, with Commercial single lock joints, using 14"x20" I. C. 108-lb. plates, per square foot..... $0.50

Fire Door Measurements

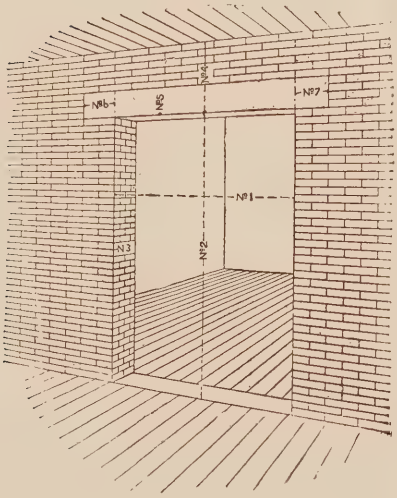
When ordering, state if the head is circular like Fig. 818, or square like Fig. 819.



SKETCH No. 1

Fig. 818.

Measurement No. 1. Width of opening.
" No. 2. Height of opening.
" No. 3. Thickness of wall.
" No. 4. Headroom.



SKETCH No 2

Fig. 819.

Measurement No. 1. Width of opening.
" No. 2. Height of opening.
" No. 3. Thickness of wall.
" No. 4. Headroom (from under side of lintel).
" No. 5. Height of lintel.
" No. 6. Extension of lintel to left.
" No. 7. Extension of lintel to right.

Give material of lintel.

Fire Doors

Fig. 1701.

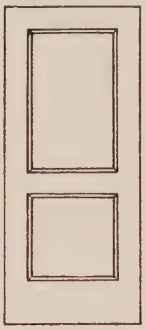


Fig. 1702.

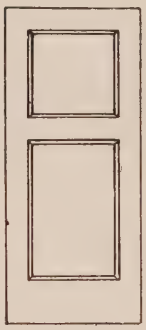


Fig. 1703.

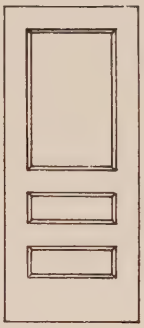


Fig. 1704.

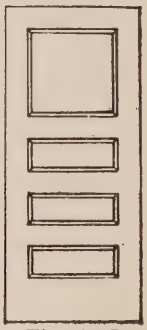


Fig. 1705.

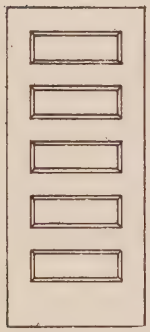


Fig. 1706.

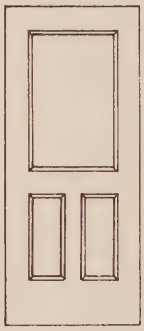


Fig. 1707.

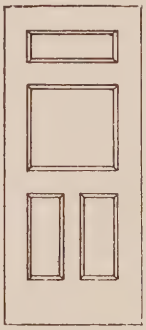


Fig. 1708.

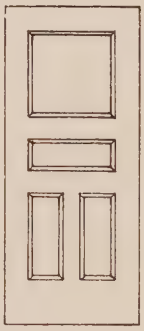


Fig. 1709.

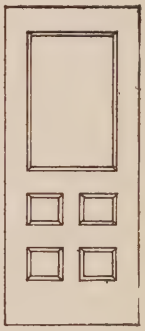


Fig. 1710.

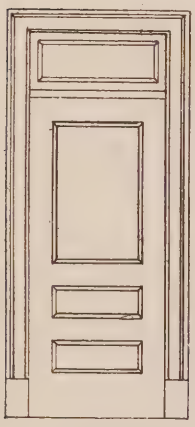


Fig. 1711.

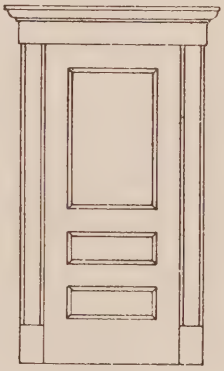


Fig. 1712.

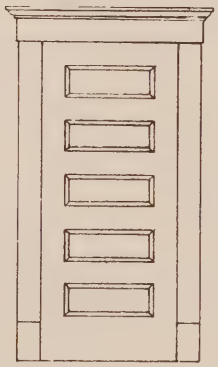


Fig. 1713.

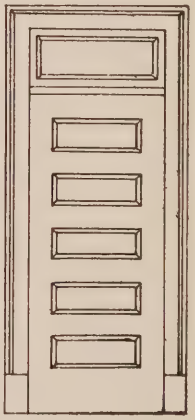


Fig. 1714.

Any of the above designs furnished for either openings in vertical shafts, or for corridor or room partitions. For details, see opposite page.

Details of Fire Doors

Fig. 1715.

Shows door made with wood core covered with No. 26 gauge material with asbestos between the metal and wood.

Fig. 1716.

Shows door made from No. 16 gauge material with structural iron frame and asbestos lining.

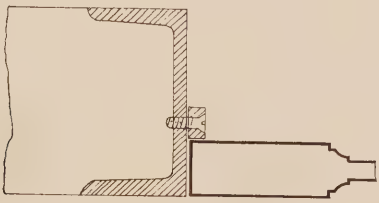


Fig. 1717.

Shows frame made from channel iron with wrought iron stop.

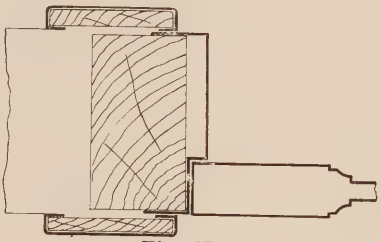


Fig. 1718.

Shows frame made from No. 16 gauge material with metal covered casings.

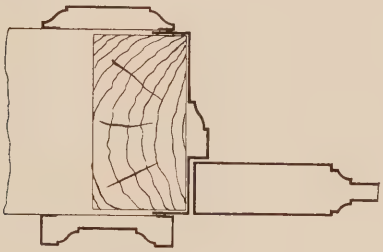


Fig. 1719.

Shows jambs and casings made from No. 16 gauge material.

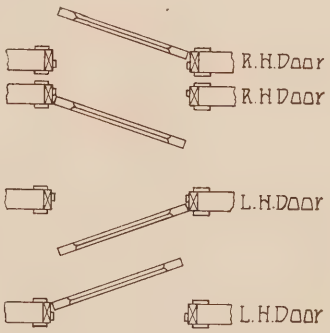


Fig. 1720.

Shows which way a right or left hand door swings.

Fig. 1721. Fig. 1722. Fig. 1723. Fig. 1724. Fig. 1725. Fig. 1726.

Shows panel mouldings used in connection with doors.

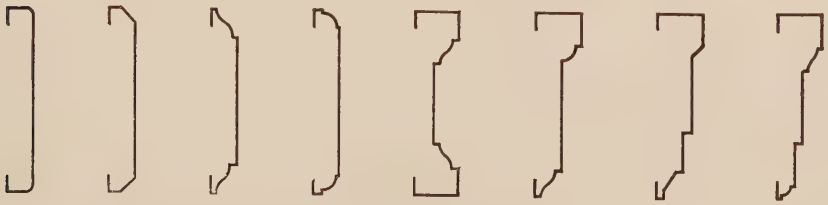


Fig. 1727. Fig. 1728. Fig. 1729. Fig. 1730. Fig. 1731. Fig. 1732. Fig. 1733. Fig. 1734.

Shows designs of casings which we can furnish, used in connection with our doors and windows.

Covington Ventilator

Why They Exhaust More Air Than Any Other Ventilator Made

Fig. 730—Style A.

The "Covington" is a ventilator scientifically and most substantially constructed; is effective in deflecting downward currents of air and rain without materially interfering with the free egress of air from the interior, is always effective when the wind blows, and will not choke in a calm. This is most important.

Edgewise braces are used to hold the several parts of the ventilator together very rigid, firm and secure in their proper relative positions, thus adding strength and preventing deformation and sagging, and insuring uniformity and symmetry of construction. These braces do not obstruct the outlet of air.

The "Covington" has an arrangement of two cones that will keep out storms and provide the best outlet of air or smoke, as described in the following paragraphs.

The diameter of the upper cone is sufficiently greater than the diameter of the lower cone, to insure the rain and snow falling thereon being deflected outside of the neck of the ventilator.

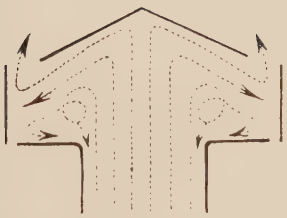
The lower cone is a valuable part of our device, *deflecting the upward current of air quickly from the body of the ventilator.* It does not produce choking eddies or counter-currents and offers the least resistance, as noted.

This cone, as hereinbefore described, divides the air and affords the best and quickest route of exit. This is a combined scientific storm-proof ventilator with edgewise braces, and always gives perfect satisfaction.

Price list on page 67.

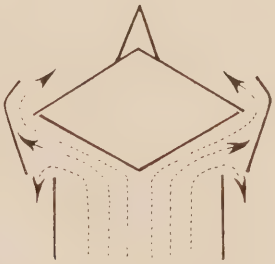
Covington Ventilator

Fig. 731—Style A.



The Old Way.

Fig. 732.



The "Covington" Way.

Fig. 733.

An upward draught is always obtained by the peculiar and substantial construction of the outside frustrum or deflector, as from whatever way the wind may blow, the air impinging against the frustrum induces an exhaust current of air from the body of the ventilator and building.

The usual style of ventilator is constructed with only a cheap vertical or single cone, the deflector thus making a very bad route of exit which does not allow the free exhaust of air.

The "Covington" has the greatest area of discharge of any ventilator made, as a comparison with the other makes of ventilators will show. Therefore, a less number are required to properly ventilate a building.

Our aim is how few, not how many, ventilators can be used in a building. We would be glad to tell you more about them if you will drop us a line.

Strength and Rigidity

Plenty of metal is used, so distributed as to give ample strength at all points. The problem of ventilation is not satisfactorily solved by providing only for admission of fresh air into a building or room. The foul air must be taken care of and drawn off. The "Covington" Ventilator is the best automatic ventilator on the market for this purpose.

Price list on page 67.

Ventilator

With Automatic Closing Device

Fig. 734—Style B.

By the use of our AUTOMATIC CLOSING DEVICE the temperature of the room can be easily and accurately regulated.

There are no flat surfaces on which dust or refuse of any kind can collect and be shaken off into the room below, as is done where the ordinary old style damper is used.

The Closing Device has a vertical motion only, and is not affected by the air currents, requiring *no attention whatever*, except when it is desired to regulate the temperature of the room, when it can be secured at any point, giving full control of the amount of ventilation. The ventilators are so constructed that back draft so common in other makes is *absolutely* impossible.

Each ventilator up to 24-inch inclusive is supplied with three feet of chain; larger sizes, five feet; thus allowing sufficient to reach to the base. We also furnish a *fusible link* with each one; this link should be located at a point in the operating chain, which fire or extreme heat would reach the earliest, thereby causing it to fuse and allow the Self-Closing Device to act and shut off all draft, thus retarding the fire.

Our Claims

First—Ventilating properties; the lower cone divides the upward air currents, deflecting them outwardly from the body of the ventilator, an upward draught being constantly maintained by the construction of the deflector, so that, from whatever direction the wind blows, it produces an exhaust current of air from the body of the ventilator and building.

Second—Greater ventilating capacity.

Third—Heavier material and superior construction.

Fourth—Automatic self-closing device; our closing device is so constructed as to give perfect control of the ventilation at all times, it being possible to entirely shut off all draught when desired. We do not use a flat damper on which dust and dirt can collect, to be precipitated into space below when damper is opened. *In the event of fire, the fusible link*, which is furnished *with each ventilator* of this type, will act, causing the ventilator *to close automatically, shutting off all draught.* With *other types* this can only be done by operating the chain, which is *not always possible* to do when *most necessary.*

Fifth—We have no springs to become weak and no mechanism to get out of order.

Sixth.—The two guides prevent the cone from twisting or revolving and can never get out of order. The chain cannot become tangled or get out of place.

Price list on page 67.

Ventilator

With Glass Top

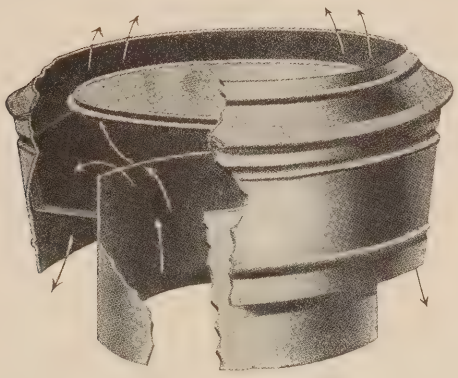


Fig. 735—Style C.

The "Covington" Ventilators are also made with glass top, which, for a limited area, fill all the requirements of a ventilator and skylight as well.

Standard Price List of All Styles of Galvanized Ventilators

We give below the area in *square inches*, also price list of the various sizes we manufacture—neck measure (which is the basis of all sizes):

Styles B and C Ventilators not made smaller than 12-inch.

SIZE at Neck	AREA Square Inches	GAUGE	HEIGHT Lin. In. Over All	SIZE Lin. In. Outside Diameter	WEIGHT in Crates	PRICE Made From Galvanized Sheets	PRICE Made From Cold Rolled Copper
6	28	26	7	10	12	$ 2.50	$ 8.50
7	38	26	8	11	13	2.75	9.25
8	50	26	10	13	14	3.00	10.00
9	63	26	11	15	15	3.25	10.75
10	78	24	12	16	16	3.50	11.50
12	113	24	14	19	20	3.75	13.75
14	153	24	17	22	24	4.00	16.00
15	176	24	18	24	30	4.50	19.50
16	201	24	19	25	35	5.00	22.50
18	254	24	21	29	40	6.50	26.50
20	314	24	24	32	50	8.00	33.00
22	380	22	26	35	60	9.50	39.50
24	452	22	29	38	75	11.50	49.00
26	530	22	31	42	90	13.50	58.50
28	615	22	33	45	100	15.50	65.50
30	706	20	36	48	115	18.00	75.00
32	804	20	38	51	135	20.50	88.00
34	907	20	41	54	150	23.00	98.00
36	1017	20	43	57	165	26.00	108.00
38	1134	18—20	45	61	190	29.00	124.00
40	1256	18—20	48	64	210	32.00	137.00
42	1385	18—20	50	67	230	35.00	150.00
44	1520	18—20	53	70	250	38.00	163.00
46	1661	18—20	55	73	275	42.00	180.00
48	1809	18—20	57	77	300	46.00	196.00
50	1963	18—20	60	80	325	50.00	212.00
54	2290	18—20	65	86	375	58.00	245.00
56	2463	18	67	90	410	62.00	267.00
60	2827	18	72	96	470	72.00	307.00
64	3216	18	77	102	530	82.00	350.00
68	3631	18	82	109	600	92.00	392.00
72	4071	18	86	115	670	104.00	440.00
76	4536	18	91	121	750	115.00	490.00
80	5026	18	96	128	830	128.00	540.00
84	5541	18	101	134	920	140.00	600.00
88	6082	18	106	141	1000	154.00	650.00
96	7238	16—18	115	154	1200	184.00	784.00
102	8171	16—18	122	163	1350	208.00	880.00
108	9160	16—18	129	173	1500	232.00	980.00
114	10207	16—18	136	182	1700	260.00	1,100.00
120	11309	16—18	144	192	1850	288.00	1,200.00

Bases are extra—see page 68. Discounts on application.

Ventilator Bases

To be used in connection with Figures 731, 734, 735, 736, 737, 753, and 754

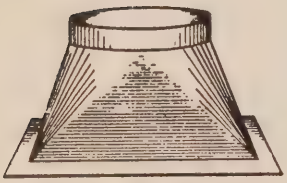


Fig. 741.

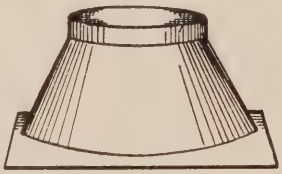


Fig. 742.

Fig. 743.

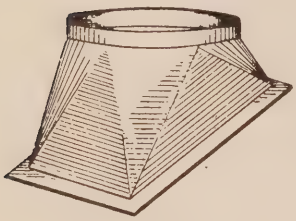


Fig. 744.

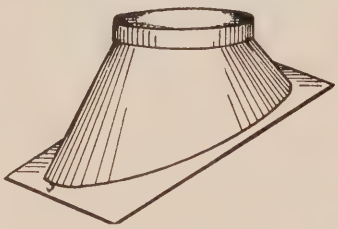


Fig. 745.

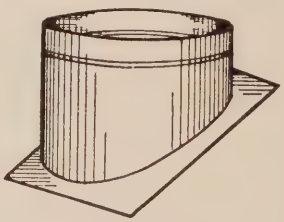


Fig. 746.

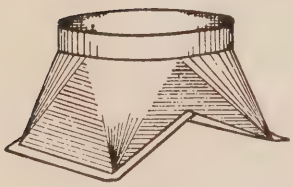


Fig. 747.

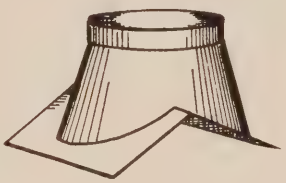


Fig. 748.

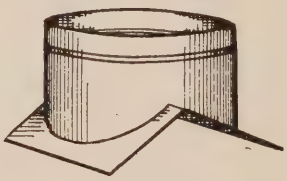


Fig. 749.

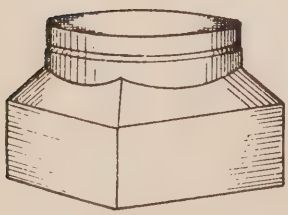


Fig. 750.

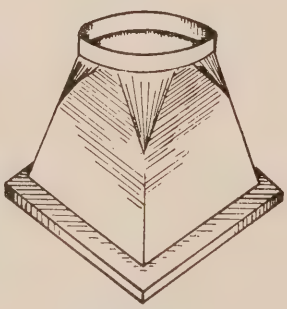


Fig. 751.

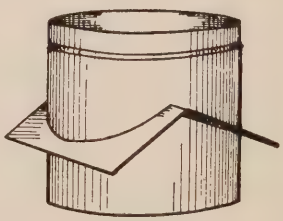


Fig. 752.

When ordering ventilators state if bases are wanted.
Give the style, also pitch of roof where ventilators are to be used.
Price depends on the quantity, size and height.

"Mecco" Metal Spanish Tile

Tile roofing, both Mission and Spanish, is considered by Architects and those familiar with real artistic roofing as the very best shape for roof beauty. As evidence of this it is only necessary to cite you to the many fine mansions, public buildings and churches in all parts of the United States that have been covered with this style of roofing and universally admired.

To supply the demand for a roofing that has all the artistic effect, the beautiful curves and lines, and the lights and shades of ancient roofing tile, without the disadvantage of excessive weight, this company manufactures two different constructions of Spanish Tile—individual tile with lock joint, and cluster tile made in sheets containing eight and ten tile. Both styles are made from painted tin, painted galvanized iron, painted steel and copper.

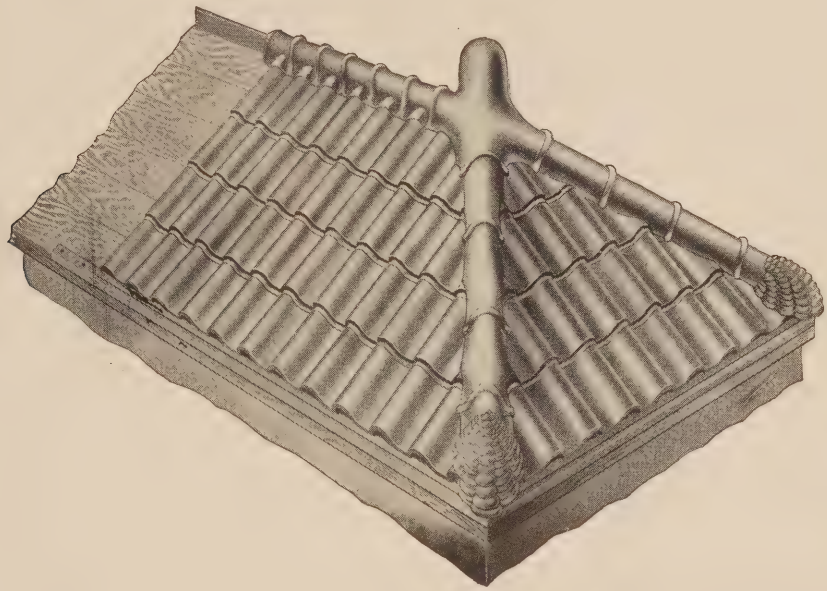


Fig. 248.

Metal Tile has many advantages over Clay and Terra Cotta. The great weight of Clay Tile, their liability to breakage, and the high cost have kept them from common use. Clay Tile absorbs a great amount of moisture, so that freezing and thawing causes them to crumble. Where protection from driving rains and fine drifting snow are a factor, tight joints are necessary.

Fig. 250.

For a desirable, ornamental, storm, dust and fire-proof roof, our Metal Spanish Tile meets all requirements. You avoid the unsightly, plain roof finish, have a roof which is low in cost, and combines many desirable features you can not find in any other roof covering. Spanish Tile is suitable for large or small houses and bungalows and should be the first choice if an artistic roof is wanted.

Write for catalogue showing complete line of Spanish Tile.

"Mecco" Metal Ceilings

Our Ceilings are all made with repressed beads and die punched nail holes, which saves 25 percent of the cost of erection.

The architect may safely specify them; the owner may cheerfully use them; while the sheet metal worker will find them easier to erect than any others. Details of arrangement mailed on request. Estimates furnished on appropriate designs upon receipt of plans or sketches.

Fig. 1005.

Fig. 1016.

Plaster ceilings frequently crack and become unsightly, or fall. Steel ceilings do neither. They stay in place and give an artistic appearance to the room. The expense of maintenance is a minimum. Given a finish of good paint, they may be brightened and renewed by soap and water.

Our new method of manufacture guarantees that MECCO ceilings are free from those defects common to ceiling of earlier and antiquated makes.

They are quickly and accurately erected, and not only present a good appearance, but save time and money in erection.

"Mecco" Portable Garage

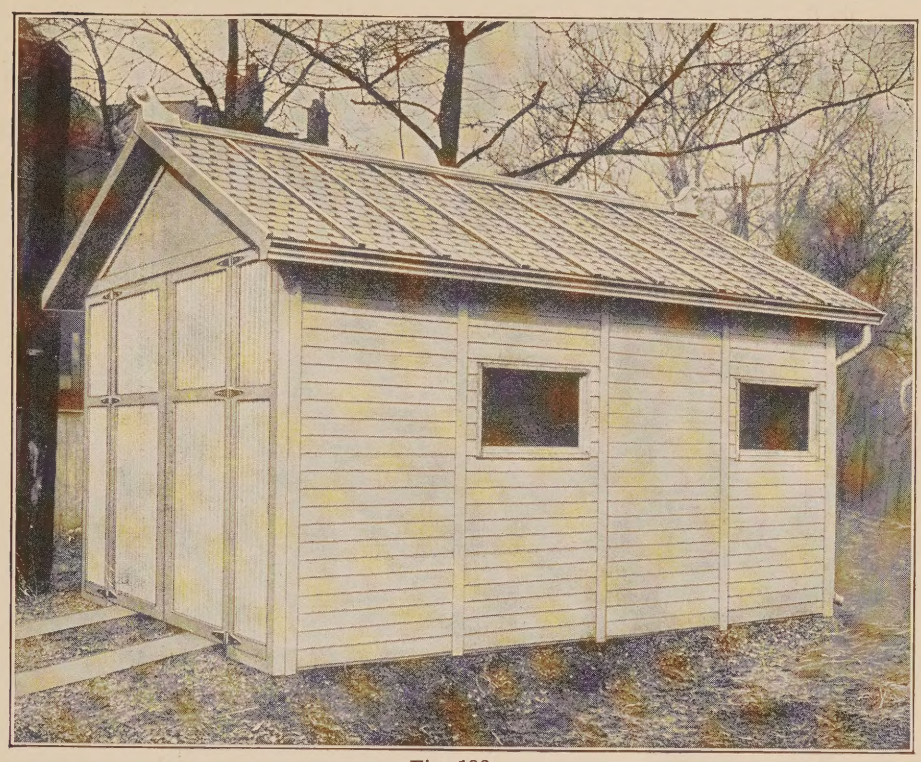


Fig. 196.

Garage is made up from panels consisting of a wood frame covered with metal. The wood frames are made from No. 1 grade surfaced yellow Pine, well braced, to which the Metal is applied. The side panels are 4′ and 5′ wide by 8′ 4″ high; the roof panels are 4′ and 6′ wide and in length to suit the width of the Garage.

Side panels are furnished with the entire surface covered with Galvanized Steel Weatherboard, also with windows and small doors inserted. As panels are interchangeable, a variety of combinations can be made; door and window sections can be placed as desired; the sections are held together with bolts. The entire Garage can be erected in two or three hours.

The woodwork is designed and arranged so that standard sizes of wallboard may be applied. Drawings and instructions showing how to erect are furnished with each garage.

Portable Garages are furnished in the following sizes:

Height in center	10′ 6″	Width	10′	Length	12′	Price,	$81.00
" " "	10′ 6″	"	10′	"	16′	"	93.00
" " "	10′ 6″	"	10′	"	20′	"	105.00
" " "	11′ 0″	"	12′	"	12′	"	88.00
" " "	11′ 0″	"	12′	"	16′	"	100.00
" " "	11′ 0″	"	12′	"	20′	"	113.00
" " "	11′ 6″	"	14′	"	12′	"	94.00
" " "	11′ 6″	"	14′	"	16′	"	107.00
" " "	11′ 6″	"	14′	"	20′	"	121.00
" " "	12′ 0″	"	16′	"	12′	"	100.00
" " "	12′ 0″	"	16′	"	16′	"	115.00
" " "	12′ 0″	"	16′	"	20′	"	129.00
" " "	13′ 0″	"	20′	"	12′	"	113.00
" " "	13′ 0″	"	20′	"	16′	"	129.00
" " "	13′ 0″	"	20′	"	20′	"	145.00

PRICES WITHDRAWN. Write for present prices.

The above prices are for the material crated f. o. b. cars. Price includes the following:

1.—Two (2) Doors complete, 4′x8′, with Hinges and Hasps attached and metal applied.
2.—Two (2) Panels with Windows inserted, ready for Glass; size of Window 37″x25″, including ¼″ Ribbed Wire Glass.
3.—Sufficient Roof and Plain Panels to make Garage the size ordered.
4.—Ridging and two (2) Scroll Finials.
5.—Corner Boards and Joint Strips.
6.—Top and Foot Bolts for fastening Doors.
7.—Wood Bracing for side and roof sections.

Write for illustrated catalogue.

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